S. HRG. 98-444

S. Con. Res. 26, A Resolution to Approve Funding for the MX Missile

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COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

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FIRST SESSION

SPECIAL HEARING

Department of Defense

Nondepartmental Witnesses

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SENATE CONCURRENT RESOLUTION 26, A RESOLUTION TO APPROVE FUNDING FOR THE MX MISSILE

TUESDAY, MAY 3, 1983

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The committee met at 9:35 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Mark O. Hatfield (chairman) presiding.

Present: Senators Hatfield, Stevens, McClure, Kasten, Rudman, Proxmire, Huddleston, Leahy, and Sasser.

NONDEPARTMENTAL WITNESSES

OPENING STATEMENT OF CHAIRMAN HATFIELD

Chairman HATFIELD. The committee meeting will come to order.

This morning we begin 3 days of hearings on the President's Commission Report on Strategic Forces. The essential question, as we all know, is whether to approve the release of $10.6 billion in fiscal year 1983 funds for the eventual deployment of 100 MX missiles in existing Minuteman silos.

COMMISSION RECOMMENDATIONS

While Senate Concurrent Resolution 26 deals only with this single issue, the President's Commission has made a number of other recommendations which pertain to the overall question of strategic modernization. Briefly, the Commission also recommends: First, improving the command, control, and communications capability; second, continuing advancement of the Trident II and D–5 ballistic missile program; third, continuing the B–1 bomber program and air-launched cruise missile; fourth, pursuing R&D on antiballistic missiles, along with decoys and penetration aids for our ballistic missiles; fifth, designing a single-warhead ICBM, the so-called Midgetman; and finally, the Commission recommends the undertaking of a program to resolve uncertainties about silo and shelter hardness.

I believe it is important for the members to be reminded, and the public to understand, that this committee will not be acting on all those parts of the Commission's report, only that portion dealing with the basing mode for MX. In fact, pursuant to language adopted by the Congress last year [Public Law 97–377, the continuing

resolution], we are statutorily prohibited from dealing with anything but the basing mode for MX.

PREPARED STATEMENT

With those administrative remarks out of the way, I want to place the remainder of my statement in the record, as though read, and recognize any other Senators for opening statements.

[The statement follows:]

PREPARED STATEMENT OF HON. MARK O. HATFIELD,

CHAIRMAN, SENATE APPROPRIATIONS COMMITTEE

The 1980s have ushered in an age of deepening strategic anxiety. We have entered an era in which remarkable scientific advances in weaponry, wedded to increasing geopolitical tension will heighten international and strategic instability. It is my strong belief that the MX missile contributes significantly to this increasingly perilous state of affairs. Moreover, the admitted vulnerability of the basing mode selected by the President narrows even further the "hair-trigger" which may well launch us into nuclear war. Let me explain.

The report of the President's Commission on Strategic Forces recognizes, for the first time, the vulnerability of any MX basing mode, yet goes on to recommend that we place in these existing silos 100 of our most sophisticated and powerful warheads. How can such a vulnerable system deter Soviet aggression unless instead, it is to be used for first-strike capability?

As well, the Commission admits the "window of vulnerability" is significantly more narrow than earlier reported. But why so? Is Soviet technology less developed than purported? Or has the "age" of our existing minuteman system with its A–15 warheads been overstated? Despite its rather profound findings, the Commission has come to yet another ambiguous conclusion by recommending that we close the window twice. Once with 100 MX missiles, and again just 5 years later with the Midgetman. One must beg the question once again. Why? For Symbolism, we are told.

Soviet hardliners will be quick to draw the darkest implications from the Scowcroft recommendation, just as our strategists regard with intense suspicion the galaxy of Soviet weaponry. They will point to repeated failures in the U.S. Congress of resolutions renouncing the first use of nuclear weapons. They will recall that we have been the only nation to have dropped atomic bombs on civilians. And they will look with undisguised anxiety at the massive, complex, and highly sophisticated arsenal that increasingly threatens their own, more vulnerable, forces.

In the final analysis, the Soviet Union and the United States are embarking on an arms race that will change the shape of strategic policy and enhance the possibility of nuclear war. If the Scowcroft recommendation is adopted, this will be done in the name of strategic symbolism, and not because MX missiles placed in fixed silos enhance our true capability or deter Soviet aggression.

OPENING STATEMENTS OF COMMITTEE MEMBERS

Chairman HATFIELD. I also want to state, because of the time constraints, I request each member introduce their statements into the record, or make such comments as they wish during the period of time they are allocated for questions.

The procedure I suggest we follow this morning is both our witnesses—and we certainly are delighted to have both you gentlemen here—to give your formal statements either in summary fashion or highlight as you desire, and then the committee will proceed with questions to either or both of you gentlemen, and the committee members will be allocated 10 minutes for their question period.

Are there any opening statements at this point?

Senator STEVENS. Mr. Chairman, I would just like to state to my two good friends that the Senate will open at 10 and I will have to

go over there. I will have to be gone during part of your testimony, even though I have some questions. When I return, I will ask them.

I congratulate you on holding these hearings, and for introducing the resolution required to have the hearing. I intend to be one of those who supports the resolution to get to the floor and on the floor. So, I look forward very anxiously to the outcome of these hearings that you are conducting, Mr. Chairman. Thank you.

Chairman HATFIELD. Thank you, Senator Stevens.

Senator Rudman.

Senator RUDMAN. No statement.

INTRODUCTION OF WITNESSES

Chairman HATFIELD. This morning we have Mr. McGeorge Bundy, who was Special Assistant to Presidents Kennedy and Johnson, president of the Ford Foundation, and currently professor of history at New York University, what we might call one of the old hands around Washington who we are always delighted to welcome back; and Adm. Stansfield Turner, former Director of the CIA under President Carter, and with a very distinguished naval record and many other outstanding contributions to public service.

Gentlemen, you really set the tone and the level of this hearing by your presence here today, and we are most appreciative of the time you have given to the review on this Commission report. Without further time taken from you, we want to hear from you now. Mr. Bundy, if you wish to lead off, we will be delighted to hear your remarks.

NEW YORK UNIVERSITY

STATEMENT OF McGEORGE BUNDY, PROFESSOR OF HISTORY, NEW YORK UNIVERSITY

PREPARED STATEMENT

Mr. BUNDY. Thank you very much, Mr. Chairman. I have a prepared statement which is available here for members of the committee and for the press. I don't wish to take your time or the committee's time to read it all. Let me rather try to comment briefly to what looked to me like the major issues that the committee will have to consider, Congress will have to consider.

[The statement follows:]

PREPARED STATEMENT OF MCGEORGE BUNDY

PROFESSOR OF HISTORY

NEW YORK UNIVERSITY

I am honored by your invitation to appear before your Committee. I come to question the current proposal to deploy 100 MX missiles in Minuteman silos. Unless a far better case is made in these and other hearings, I believe that Congress should reject this recommendation and should instead insist on a much more searching and comprehensive analysis of what is now required for strategic stability and overall deterrence, both in modernization and in arms control policy. Because the Scowcroft Commission was created and selected by men whose overriding objective was simply to save the MX missile, its membership was not broad enough to encompass the full range of relevant judgments. My most urgent specific recommendation is that the Subcommittee should seek out the views of many other Americans whose assessments have equal claims to respect.

My general appraisal of the Commission report is contained in a short article initially prepared at the invitation of the New York Times, and I attach this paper. It notes a number of constructive contributions of the Commission's report, but it also raises a number of questions. In this statement I develop further a number of responses to the major arguments of the Commission.

First: I believe that the deployment of MX-in-Minuteman could open the way to a most dangerous competition in destabilizing, vulnerable, first-strike weapons. Over the last generation we have left it to the Russians to deploy such weapons, correctly preferring to build only survivable systems. But the only thing more dangerous than for one side to rely on vulnerable first-strike systems would be for both sides to do so. Aware of this danger, the Scowcroft Commission asserts that MX-in-Minuteman should "encourage" the Russians to move away from their big MIRVed ICBMS. But will it? Unless I am misinformed, the preponderance of opinion among close students of Soviet behavior is that the Soviet answer to MX-in-Minuteman will be the deployment of their own similar system, which is already being tested. The Commission strongly hints that we should then reply by enlarging our own deployment of MX. But if we should build two hundred MX-in-Minuteman with two thousand warheads, we would be creating a highly unstable situation of mutual first-strike vulnerability between ICBM forces on both sides. Even the deployment presently proposed would be highly uncomfortable in any grave crisis.

Let me make this point another way. If our country today had the very same strategic deployment that the Soviet Union has, relying primarily on vulnerable MIRVed ICBMs, the world would be an enormously more dangerous place than it is, because in that case each side might persuade itself, much more plausibly than either one can today, of the possible advantages of a pre-emptive attack. The last thing Americans should want is a major competition in this kind of threatening and vulnerable weaponry.

I recognize that the Commission itself is wary, in parts of its report, of building forces that could threaten the whole Soviet ICBM force, and I also recognize that Congress and the country are quite unlikely to support any second or third deployment of MX-in-Minuteman. But is not that simply another way of saying that the only good thing about the Commission's desire to convert the Russians by the threat of a continuing MX competition is that this threat will not be executed?

Second: MX-in-Minuteman will not contribute to the progress of strategic arms control unless there is a drastic modification of the Administration's approach to the START negotiations, a modification of which there is at present no sign. So far the Administration has rigorously insisted on

unbalanced Soviet concessions which do not seem to be negotiable, and there is much language in the Commission's report that can be used to reinforce this stance. But the only possible use of MX-in-Minuteman as an element in arms control policy would be as a program to be traded out, together with the emerging Soviet MX, in some kind of no-new-MIRV agreement. I recognize that it will not be easy for Congress to encourage the Administration in this direction, but this possibility is the only one that I can see for using MX now to make a constructive contribution to national security.

Third: We do not need MX-in-Minuteman either to prove our mettle to the Russians or to fill in an asserted gap in our range of deterrent capabilities. The Commission makes two claims here. The first is that if we now cancel the MX the Russians will doubt our "national will and cohesion." But the Russians know as well as we do that we have half a dozen other programs of strategic modernization in hand, and they do not forget what Administration spokesmen constantly pass over -- the commanding U. S. lead in strategic systems other than ICBMs. The Commission itself specifically recognizes the growing role of the submarine force, and it recommends no change in the probably redundant program of bomber modernization. We have so many good programs in hand that we have no need to impress the Russians with a bad one.

Nor is the Commission's more technical argument persuasive. It tells us, more by assertion than by careful argument, that MX-in-Minuteman is needed to repair an imbalance in prompt hard-target kill capability. But neither the Commission nor anyone else has explained why this need is now so overwhelming that we should deploy the admittedly vulnerable MX-in-Minuteman when we have four other serviceable hard-target killers on hand and on order -- 900 Mark 12A warheads already in Minuteman IIIs, thousands of missiles deployed or programmed for bombers, cruise missiles in attack submarines, and the D-5 missile that will be in Trident submarines. All these systems are more survivable, warhead for warhead, than MX-in-Minuteman. I have no doubt that strategic planners can produce "requirements" for MX too; experience shows that there is no limit to that process. But for deterrence, rather than for exotic and unreal scenarios, our strategic forces are more than ample today, and for deterrence the weapon that arrives in hours is just as impressive to political leaders as the one that arrives in minutes.

Fourth: We do not need MX-in-Minuteman to prove ourselves to our allies. The Commission asserts that we require this deployment "to assure our allies that we have the capability and will to stand with them." This assertion should be compared with the real opinion of Europeans, and last week there were two important statements on the point. One came from an outstanding American observer, Flora Lewis, and the other from one of the most respected of British conservatives, Lord Carrington.

Ms. Lewis reported from Rome that in a meeting of the Trilateral Commission,

> "...West Germans were astonished to find an American politician wondering whether failure to deploy the MX missile would be taken as a sign of United States weakness, whether it would reinforce the arguments of West Germans opposed to Pershing 2's. Would they say that if Americans don't install bigger missiles why should they?
>
> "The situation is just the opposite, the West Germans explained. 'What we're afraid of isn't American weakness,' was the politely truncated answer, leaving implicit that the real fear is of stumbling into war." (New York Times, April 22, 1983, p. 31.)

What Lord Carrington said is still more trenchant. His comments are not directed at the specific issue of MX, but who can doubt that he has some people in Washington in mind when he calls for more confidence in the powerful present deterrent strength of the West and tells us all not to be "hagridden by fear of military inferiority?" It is not Europeans, but overzealous Americans, who contend that MX is a poultice for the Alliance.

Fifth: The assertion that the Scowcroft Commission embodies a general bipartisan consensus of experts is quite unjustified. While no one should question the sincerity of the Commissioners and the "Senior Counselors" who have endorsed their work, it is no secret that both the Commission's members and its counselors were screened in advance with support for MX as a requirement. There are persons of at least equal experience and judgment who have other views on these matters, and I suggest that this Committee should ask for their comments on the issue, either by testimony or in writing.

It is not for me to say who should be consulted, but for illustrative purposes let me simply note a number of people who have expressed themselves on these problems over the last year or two and who have had responsible experience in the past. (In most cases I do not know their opinion of the current proposal to put MX in Minuteman silos.) Among former Secretaries of State I note Dean Rusk, Cyrus Vance, and Edmund Muskie; among former Secretaries of Defense, Robert McNamara, Clark Clifford, and Elliot Richardson; among former assistants to Presidents on these matters, Andrew Goodpaster; among former Directors of the CIA, William Colby and Stansfield Turner; among other military professionals Maxwell Taylor and Elmo Zumwalt; among former Arms Control negotiators, Averell Harriman, William Foster, Gerard Smith and Paul Warnke; among Science Advisors to Presidents, James Killian, Jerome Wiesner, and Frank Press.

Sixth: In the face of the obvious need for major reductions in the Administraton's defense budget, MX-in-Minuteman becomes a strong candidate for elimination. Even though it makes no significant contribution to overall deterrence, it carries a price tag conservatively estimated at $15 billion over the next five years. Yet almost everyone except Secretary Weinberger now recognizes that reductions very much larger than $15 billion are now imperative. If our government does not make any hard choices among big-ticket items, it is predictable that what will get shortchanged is precisely what is most needed: things like spare parts, training, and general operational readiness -- the very things that matter most in the real world.

* * *

The long and unhappy history of this ill-fated weapon system has lessons for us all, and some but not all are sketched in the Scowcroft Commission's report. It is indeed time to think again about the relation between arms control and stable deterrence. We should indeed concentrate our attention more on warheads and less on launchers. We also need to look further ahead than is our habit, not simply to our own favorite new weapons, but to the situation we will face as the Soviet Union makes its own new choices. Our mistakes with MX can help us do better, but only if we lift our eyes from the single, narrow, short-term objective of deployment of MX at any cost in any available place, and examine the future dangers of the nuclear weapons competition considered as a whole.

MAJOR ISSUES FOR CONSIDERATION

Mr. BUNDY. There are three major issues for consideration. The first is that the Scowcroft Commission, I think correctly, has concluded that there is no independently survivable way of deploying the MX missile. That puts an end to the principal claim made for this system over many years, in four administrations. We have made it a principle ever since the later years of the Eisenhower administration, when we first faced the prospects of major intercontinental forces, that we would not build a major nuclear system at the strategic level if it could not survive, for the obvious reason, as Eisenhower was the first President to perceive, the ultimate danger in the nuclear age is a danger of a surprise attack which might leave the United States defenseless. So it has been a cardinal principle with us that nuclear systems at the strategic level should be able to survive an enemy attack, whether by surprise or whether the expression of some great political crisis, and I don't think we should pass over lightly the change that is implied in a recommendation to build a system at great expense which does not have this fundamental characteristic. It is easy enough to talk about eating crow and changing one's mind, but what we have really changed is one of the fundamental principles of strategic procurement if we proceed with MX in Minuteman silos, and I think that simply cannot be kept for one side.

The second point is more complicated, and I ask you to bear with me for 2 or 3 minutes while I outline it.

SOVIET SUPERIORITY IN ICBM'S

We have all been troubled, civilians and military officials alike, over the last 10 years by the emergence of a clear superiority of Soviet ICBM forces measured against ours. There is no doubt that that superiority exists. It is an imbalance. It is a troubling imbalance. But it is not critically dangerous to us as long as two conditions can be met. It would be dangerous if there were not other balancing elements between the two strategic nuclear arsenals or if there were some specific advantage for the Soviets in this particular imbalance. I don't think either of those conditions hold. I think the overall balance is stable, strong. The Soviet advantage in ICBM's is balanced generally by our own commanding superiority both in submarine-based forces and in strategic aircraft. In overall, our forces today are more survivable today than Soviet forces; more of their warheads than ours are vulnerable to any first strike. Both sides have more than the number of survival warheads necessary for overall deterrence, and both sides are adding more.

Nonetheless, pursuing this point, I think the Soviets do have a specific kind of superiority in one particular ability—in the ability to destroy hard targets. Even there, if you look at it overall, we have a more varied and survivable hard target capability than they do. But it is true only a relatively small part of our force can be ordered to make immediate responses by missile attacks. Submarines are hard to reach for immediate command and control. Bombers take 8 hours, not 30 minutes. So the Soviets do have a superiority in the field of prompt, hard target kill capability, and the question is what advantage this superiority confers.

I think it is clear in the case of overall general nuclear war there is no such advantage. Our own survivability and our own wide and varied hard target kill capability in a general war situation are ample for deterrence because at that point it is not critical for a Soviet leader whether its command posts are going to last 30 minutes or 8 hours. So in full-scale war, the only sane course for both sides is to avoid it. And we come down to the case of whether one needs a prompt, hard target kill capability larger than the one we now have for less than general war situations, and I think it reasonably fair when you look at it hard there is no such requirement.

MARK 12–A WARHEADS

There are 8,900 modern Mark 12–A warheads in our Minuteman force today, each with high accuracy, and it can be improved if we choose, a force that has been acclaimed over the years by leaders in and out of uniform precisely for its outstanding prompt, hard target kill capability. I submit in less than general war situations 900 warheads are many times more than enough for any kind of limited, prompt action against hard targets than may ever seem necessary to any President in any situation short of overall war.

In summary, it appears to me when you look at it closely, the MX in Minuteman is literally nothing we now need for military balance. It does not add to survivability. Its additional contribution to existing hard target kill capabilities is not needed in any conceivable scenario of deterrence.

ARMS TALKS

Now third and finally, we have the problem of the connection between MX in Minuteman and the search for a positive Soviet response to arms talks. This I think may be the deepest hope of the members of the Scowcroft Commission somehow it can serve this purpose. I don't want to say it has no value here, only that that value is quite limited because the Soviets will certainly not give us something for nothing. They never have in any arms control negotiations. Neither have we.

I think its refusal to recognize this reality has made our opening position in START a failure. The objective of that proposal, that opening position, is the same as that of the Scowcroft Commission—to reduce the size of the Soviet MIRV ICBM force. But there is no sign yet of any of the readiness on our side for balancing reductions in areas where we are ahead, and I cannot honestly see how 100 MX in Minuteman will change that prospect in any large-scale way. Most observers of Soviet behavior I think would predict a decision to go ahead with MX in Minuteman would simply intensify Soviet determination to develop and deploy their own parallel systems, also in development and testing. The most we could get I think is a possible stew toward a no-new-MIRV agreement, and that is an effort well worth making, but it is not the large-scale reduction in Soviet MIRV ICBM's of which people too easily talk when they compare a relatively small system similar in development to what is afterall the mainstay of Soviet strategic strength.

So in conclusion, Mr. Chairman, what I would urge on this committee is that it carefully review the quite limited value of MX in

Minuteman as against its very substantial cost, set it in the context of all nine other modernization programs that are going forward, and consider closely what a postponement of any further authorizations or appropriations would not create just the right stimulus to serious thought about the overall problem of strategic balance and the overall problem of arms control and responsible communication between the executive branch and Congress.

Thank you, sir.

Chairman HATFIELD. Thank you.

Admiral Turner.

FORMER DIRECTOR, CENTRAL INTELLIGENCE AGENCY

STATEMENT OF ADM. STANSFIELD TURNER, FORMER DIRECTOR, CENTRAL INTELLIGENCE AGENCY

NEWSPAPER ARTICLES

Admiral TURNER. Mr. Chairman, I would like to second Mac Bundy's views, all of which I agree with thoroughly, and try to amplify a couple of points perhaps.

Before elaborating on those points, I request that two articles outlining my stand on this issue be placed in the record.

Chairman HATFIELD. They will be inserted at this point.

[The articles follow:]

Los Angeles Times Friday, April 8, 1983

THE EAGLE FORCE CAN FLY AS AN ALTERNATIVE TO MX

By STANSFIELD TURNER

For four months, a presidential commission headed by retired Air Force Lt. Gen. Brent Skowcroft has been laboring on an unenviable task, and the results are due any day now: recommendations for basing the MX, the new intercontinental missile that President Reagan is eager to deploy and that Congress is determined to scrap.

As the impasse hardens, and as national-security needs intensify, this might be the time to reconsider a concept that once was examined and rejected as an alternative to the MX. That is the so-called Eagle Force of aircraft armed with nuclear missiles. It would serve the aims of the Administration and Congress. It also would be a better addition to our strategic nuclear forces than a ground-based MX system.

The Eagle Force would be built around the Air Force's F-15 Eagle fighter aircraft. With the support of 200 aerial tankers, 500 F-15s dispersed at military and civilian fields around the country could easily reach targets in the Soviet Union.

The Eagle Force would be more secure than 100 MXs or 100 B-1 bombers or both. Every day, some aircraft would shift to fields that were unoccupied the day before. It would be a prodigious task for the Soviets to keep track of them and to attack them all at once. The Eagle Force would not be invulnerable, but for the Soviets to knock it out would involve a massive attack and still leave them with great uncertainty as to the probability of success.

The F-15s would be modified to carry five air-launched cruise missiles each, which generally would be launched from outside the Soviets' anti-aircraft defense perimeter. The total destructive power of such an attack by the Eagle Force would be greater than that of 100 MXs or 100 B-1s, and it would cost less than the MXs and about the same as the B-1s.

We could field this force even more quickly than the MX. This would serve the President's wish to strengthen our nuclear forces as soon as possible.

With all Eagle Force components under the Air Force's wing, there would be none of the resistance that it had about being replaced by the Navy as the predominant service in nuclear defense if the MX and/or the B-1 were canceled.

One reason for the demise of the MX has been the strenuous objection from areas where it would be based. The only corresponding objection to the Eagle Force would be the periodic presence of aircraft with nuclear weapons on civilian airfields. However, the American public has become sufficiently sophisticated about nuclear weapons to understand that there is almost no probability of an accidental detonation.

Funds for the Eagle Force would be spent across many of the 48 contiguous states, so this solution would have a better reception in Congress than would any of the others that would help our economy less and only [illegible] ypical [illegible]

Beyond all this, the Eagle Force would answer more than one of our military establishment's needs. In 1980, President Jimmy Carter said that, if necessary, the United States would use military force to protect its interest in the Persian Gulf region. In 1981, President Reagan reaffirmed this in even stronger terms. Yet the U.S. military is not prepared to do that today on the scale that these Presidents envisioned. We just haven't been able to afford it while strengthening our nuclear forces and our forces for the defense of Europe as well. Within the Eagle Force, however, the 200 tanker/cargo aircraft could be of great value in transporting the Rapid Deployment Force to the Persian Gulf area, and the F-15s would be valuable in such circumstances, either for air combat or for launching non-nuclear cruise missiles at ground targets. Of course, there would be limits on how many tankers or F-15s could be taken off nuclear alert, but submarines and B-52s could be repositioned temporarily in alert status to compensate.

The one strong point of the MX that the Eagle Force could not match is its capability for rapid retaliation response. To assemble the force, refuel it in the air and deliver it to its launch points would take quite a few hours, whereas the MX would take 30 minutes or so to reach the Soviet Union once the launch button was pushed.

The desire for quick response is rooted in the military tradition of counterattacking an aggressor's forces as rapidly as possible so as to weaken those forces before they can consolidate their position and do more damage. This traditional response is not appropriate in the non-traditional sphere of nuclear warfare. Not even a 30-minute response would catch the Soviets without their still having the option of launching another wave of missiles at us before ours arrived to destroy them. Since we have always built our nuclear forces around retaliation, a slow Eagle Force would be just as useful as a fast MX force for our purposes. In fact, a slow force would be preferable because it would permit more time for deliberation and negotiation, and our objective should be de-escalation and termination of hostilities on terms acceptable to us—not "victory," which could only be pyrrhic.

Whatever decision is made, it must take into account the issues of past presidential commitments, international reaction to whatever we do, military inter-service politics and domestic economic and political considerations. With all that, the solution must make sense militarily.

When all these diverse factors are joined, the Eagle Force comes out way ahead of all other possibilities.

Stansfield Turner, a retired Navy admiral and former director of the CIA, is now a consultant in international affairs.

The New York Times Magazine

March 13, 1983

THE 'FOLLY' OF THE MX MISSILE

Our latest ballistic weapon, argues a former C.I.A. director, makes sense only as the instrument of a nuclear war fighting strategy whose adoption would threaten America's security.

By Stansfield Turner

The United States has reached a watershed in its nuclear defense strategy. President Reagan and Congress are trying to decide what to do about the MX, the new intercontinental ballistic missile that is larger, more expensive, more powerful and more accurate than anything in our military arsenal. The issue, however, goes beyond the costs and proficiency of a new weapons system. The question is whether deploying the MX would enhance our security or detract from it.

For several years now, the immediate problem with the MX has been how to base it. Placed in existing silos, it would be vulnerable to surprise attack by the Soviet Union's beefed-up strategic forces — just as vulnerable as our present generation of land-based missiles. There have been various schemes for making the MX less vulnerable, including the ingenious "dense pack" notion of placing them so close together that incoming Soviet missiles would knock each other out. These proposals have all been fended off or left in abeyance, largely on the instinct, shared by Congress and the public, that the ideas made little sense.

Yet it is unlikely that anyone will be able to find a basing scheme any more acceptable than dense pack, not even the special commission of experts appointed by the President to study the problem. Only two weeks ago, several alternative basing schemes that seem to be no more practical than dense pack were offered by the Congressional Research Service, an agency specializing in analysis for Capitol Hill. One of these was to place the missiles in planes that can remain airborne for long periods. Another was to dump the missiles into the oceans in cannisters at times of tension, and to trigger them by remote control.

It is apparent that any basing solution for this large a missile is going to require highly unusual procedures and will be highly controversial. In this circumstance, it is only natural to ask whether the MX missile is essential to our national security. Are there no alternatives? Reaching a judgment on this life-or-death issue, it seems to me, involves two basic questions:

(1) What kind of nuclear capability do we need? Do we want an ability to retaliate against Soviet cities? Or do we seek the capacity to destroy the Soviet Union's principal military targets?

(2) How large a nuclear force do we require? Must it be bigger than the Soviet Union's, or about the same, or can it be smaller and still suffice?

How our leaders answer these questions will determine whether we proceed toward greater stability in the "balance of terror" between the United States and the

Soviet Union or toward heightened instability, with all the new dangers that would entail.

There are, as we know, four types of delivery systems in our nuclear-weapons arsenal.

First, there are the intercontinental ballistic missiles (ICBM's) — large, land-based, relatively immobile missiles that travel to their targets by leaving the earth's atmosphere and re-entering it on a precalculated trajectory.

Then there are the submarine-launched ballistic missiles (SLBM's), which follow the same trajectory as the ICBM's but are based in specially designed, nuclear-powered submarines.

Third, we have the bombers — traditional, large, long-range aircraft, such as the B-52's, the core of our bomber force — carrying nuclear bombs.

Finally, there are those recent additions to our inventory, the cruise missiles — unmanned small aircraft that are transported to their launch points on bombers, submarines or trucks and that fly at a very low altitude.

Of these four systems, the land-based missiles are the most vulnerable to a Soviet attack and the submarines the least vulnerable. We should understand that there will never be a perfectly invulnerable weapons system, and trying to achieve one will be progressively difficult in the future. We must, instead, count on making it so complicated for the Russians to knock out all our nuclear forces in a short period of time that they will never feel confident of their ability to do it.

The way to increase survivability is to emphasize mobility, numbers of weapons and concealment. Bombers are mobile, and reasonably safe from attack when on airborne alert. Submarines are mobile and readily concealed at sea. Even if there should be a breakthrough in submarine detection — and no such breakthrough is foreseeable at present — submarines will certainly remain more difficult to locate than ICBM's or bombers. Cruise missiles are mobile, and small enough to be concealed, and we could have large numbers of them. Thus, for assurance that we won't be knocked out by surprise, our intercontinental nuclear forces should be built around these three systems.

What I am proposing, therefore, is a shift of emphasis in our mix of nuclear weapons — a shift away from large ICBM's, like our present land-based missiles and the projected MX, to small, multibased cruise missiles.

Such a move would not only make our deterrent forces more survivable but would serve to reduce the elements of instability in the American-Soviet nuclear confrontation. For the more we rely on ICBM's, the more nervous we will be about the threat of a surprise attack on them; our finger will have to be on the trigger. And because the MX — added to the capability of our existing ICBM's — would give us the potential for a surprise attack on Soviet ICBM's, it would make the Russians nervous; their finger, too, would have to be on the trigger. Cruise missiles, on the other hand, are too slow to threaten a surprise attack and too small to be targeted in a surprise attack by the Russians. Hence, if the United States shifted away from ICBM's and toward cruise missiles, both sides would relax somewhat and the nuclear balance would be stabilized.

The same combination would also give us as much assurance as possible that our weapons would penetrate any Soviet defense. The Russians would have to construct both ballistic missile defenses (against our submarine-launched missiles) and antiaircraft defenses (against bombers and cruise missiles traveling in the atmosphere). Both sets of defenses would have to be nearly impregnable.

It is true that because cruise missiles are small and easily concealed, it would be very difficult to verify the number of these weapons deployed by each side. Because of this, it is sometimes argued that shifting to cruise missiles would kill the chances for a new strategic arms-control agreement and thus increase tensions. But that is a specious argument.

The key objective of arms control is not control of the number of weapons but a lessening of the likelihood of anyone starting a nuclear war, either deliberately or accidentally. The critical step toward that goal is a reduction of the number of weapons that put people on edge by posing the threat of a surprise attack — and those weapons, by and large, are the ICBM's. There is no reason why ICBM's cannot be controlled by agreement — and bombers and submarines as well — even if cruise missiles cannot be counted.

The fundamental choice, then, is not between weapons of greater or lesser potency but between greater stability or less. The so-called nuclear experts, however, are finding it difficult to shed conventional military thinking, which sees advantages in "superiority" in weapons and holds that defeating the enemy's military forces is the end objective if war should break out.

Such emphasis on the power and number of weapons is misplaced. The levels of damage in intercontinental nuclear war are likely to be so high that most of the weapons we and the Russians possess will exceed any conceivable usefulness. A common nuclear weapon today has an explosive power about 40 times greater than the bomb that killed 100,000 people in Hiroshima. The United States and the Soviet Union each has about 270 urban areas with a population of more than 100,000. Imagine what several hundred such warheads could do to either country.

The United States has about

9,500 nuclear warheads and the Soviet Union about 8,000, all capable of being delivered over intercontinental distances. Some of these warheads are powerful and accurate enough to destroy "hard" targets, like ICBM silos, which are built of reinforced concrete. The remainder of these warheads are only capable of destroying "soft" targets, like cities, industries and basic military facilities. Some of the systems could hit their targets very quickly, because their time of flight to the Soviet Union is quite short and because the communications link to them is swift and sure. Others either have relatively long flight times or, in the case of submarines, are not always within reach of quick communications.

The advantage of the large land-based missiles is that they can not only hit "hard" targets but get there fast. Bombers and cruise missiles, while also capable of destroying "hard" targets, would take longer to reach their objectives. And we cannot be sure how long it will take for our nuclear-armed submarines to receive instructions and carry them out; furthermore, submarine-launched missiles are not accurate enough to be effective against "hard" targets. By about 1990, however, the undersea system will become as accurate as the other three, and the principal distinction between the four systems, in terms of their striking power, will be that bombers and cruise missiles will take longer to get there and submarine-based missiles may take longer to be launched. What difference will that make?

The question is of fundamental importance. For the answer determines which of two basic nuclear doctrines or strategies we adopt.

The first is the doctrine of retaliation. The two premises here are that we can deter the Russians from attacking us with nuclear weapons by the threat of a devastating nuclear counterblow against their urban and industrial centers; and that if, against all rational expectations, deterrence fails, we require only a limited capability to fight an intercontinental nuclear war.

The second is the doctrine of nuclear-war fighting. The premises here are that we can deter the Russians only if we are capable of waging and "prevailing" in a nuclear war; and that we require a capability to outlast the Russians in protracted nuclear war if deterrence fails.

The most critical point in deciding between these different approaches is which is the more likely to prevent the outbreak of intercontinental nuclear hostilities.

For many years, the United States relied on the first doctrine — that an assured capability to retaliate with nuclear weapons provided adequate deterrence. This view rested on the enormous destructiveness of nuclear weapons and the very high probability that they would penetrate enemy defenses. Today, there is no meaningful defense against ballistic missiles and little against cruise missiles; only bombers are vulnerable to serious attrition. Defenses will improve in the future, but since only a few nuclear weapons need arrive on target to do high levels of damage, defense will continue to be a difficult proposition.

What this means is that any Soviet leader contemplating initiating nuclear war must do more than estimate whether his nuclear forces could do greater damage to the United States than ours could do to the Soviet Union, or whether he could destroy all American nuclear forces and still have some of his own left. He must ask what might be the absolute level of damage to the Soviet Union. There would be little satisfaction to him in doing more damage to the United States or eliminating our nuclear strength if the damage suffered by the Soviet Union were unbearable.

This kind of calculation — that a preponderance of nuclear force is meaningless if the opponent retains the capacity for massive retaliation — is, of course, an entirely new way of looking at wars, and it is probably because of its newness that it came under challenge in the United States some years ago. As one critic, Colin S. Gray, put the argument in an article last fall, "Deterrence cannot be simply based upon the ability to bring on a holocaust." "For a threat to be believable, and thus an effective deterrent," he wrote, "it has to posit purposive military actions, and those actions have to be directed against targets that are of very high value to Soviet leaders."

More specifically, Mr. Gray and others of his persuasion worry about what would happen if the Soviet leaders were to unleash a nuclear attack aimed not at America's cities but at its nuclear forces. Their contention is that no American President would be likely to implement the longstanding doctrine of retaliation against Soviet cities, because he would know that this would invite the devastation of American cities by the Soviet Union's remaining store of missiles. Out of such reasoning the war-fighting doctrine was born.

This doctrine says we need nuclear forces powerful enough not only to devastate the Soviet Union's cities but to destroy its intercontinental nuclear forces, however long it takes. Such a capability, it is argued, would place the Soviet leaders in the position of knowing that they could not "prevail" if they were to start a nuclear war with the United States.

In my view, the doctrine of nuclear war-fighting is wrong in denying the credibility of the threat of retaliation against Soviet cities and industry. The argument, to repeat, rests on the contention that the Soviet leaders might well order a strike at our nuclear forces in the belief that

the American President was not likely to retaliate with a blow against Soviet cities. What this overlooks is the great uncertainty as to how anyone would react in such a situation. There is no precedent on which to base a judgment.

Can anyone say with any certainty that a President would not launch all the weapons we have if the Russians were to launch even a limited attack on our nuclear weapons sites? Rationality may not prevail in such circumstances; or the President may react before it is clear that the attack is of a limited nature; or he may act in the belief that the Russians had launched a full-scale attack; or he may believe that any nuclear war is bound to escalate, and that our best move is to go all-out right away and hope to limit the Russians' ability to strike a second time.

Beyond guessing how the President might react, the Russians would have to worry about a complete breakdown in our chain of command. What would the commanders of our nuclear submarines do if, knowing that the United States had been attacked, they lost all contact with headquarters? Just half a dozen submarines could place almost 1,000 nuclear warheads on the Soviet Union.

In short, any neat calculation as to how the United States might respond could be wrong in so many ways that no Soviet leader could feel confident of the outcome of his launching even a small-scale nuclear attack on our country. Even gamblers grow cautious as the stakes rise, and a Soviet leader contemplating a nuclear attack on the United States would know that he would be gambling the very survival of his society. In my view, only if we were to push the Soviet Union into a desperate situation threatening its existence as a Communist state could a Soviet leader conceivably decide on the gamble of a nuclear attack on the United States.

The war-fighting school also argues that the Russians are going ahead on their own to build a nuclear war-fighting capability; that this makes nuclear war a likely eventuality; and that the Russians can be deterred from initiating such a war only if we demonstrate to them that we have the same kind of capability and could successfully outfight them in such a conflict.

There is ample evidence that the Russians are making very substantial investments in intercontinental nuclear forces, and that they are paying attention to all the components of a war-fighting capability. There is a world of difference, however, between preparing for the possibility of nuclear war and preparing deliberately to start one. Nothing I have seen persuades me that the Soviet leaders' intention in building their nuclear war machine is to use it offensively.

In any case, we don't have to go beyond a strategy of retaliation to be able to wage war against the Soviet Union's nuclear forces, if forced to. We already have a considerable capacity to engage in that kind of conflict. As I have noted, all of our four nuclear weapons systems are either capable of striking hard military targets or will acquire that capability before long. A President, then, could choose to retaliate only against cities, or only against hardened targets, or against both.

What he could not do with the bombers, cruise missiles and submarine-based missiles is to strike back rapidly. The key difference between the war-fighting concept and the retaliatory strategy hinges on whether we need an ability to retaliate quickly. If we do, ICBM's are clearly essential and cannot be replaced by cruise missiles. In my view, rapid response, in the event that deterrence breaks down, is not essential, and is even dangerous.

It is a natural military instinct to want to counterattack as rapidly as possible, in the hope of slowing the enemy's offensive. In nuclear war, however, a rapid response would have the opposite effect. If the Russians were to launch a nuclear attack against us, they would certainly be on the alert for our response. If we were to strike back at their nuclear forces, especially their vulnerable land-based missiles, they would have the option of launching those missiles while our attacking force was still in flight.

It would make no difference whether we counterattacked with ICBM's that could get to their targets in 30 minutes or with cruise missiles that took as long as 12 hours (including the time it took to transport them to within launching distance). The Russians would see us coming and have ample time to launch their missiles while ours were on the way. There is no way to gain surprise once the nuclear genie is out of the bottle.

By setting an objective of attacking the Soviet Union's remaining nuclear weapons after a Soviet surprise attack, the war-fighting school would confront the Russians with the alternative of launching those remaining weapons quickly or seeing them destroyed. Yet the last thing we would want to do in that kind of situation is force the Russians to launch even more weapons against us. Instead, our objective should be to retaliate not by going after just their remaining missiles but by hitting both military and civilian targets intensively enough to demonstrate that continuing this war would lead to escalation and disaster.

The object of our counterattack would be to persuade the Soviet leaders to absorb the blow and negotiate. That would not be an easy decision for them to make. It would be more difficult to make in the 30 minutes' warning they would have of an attack by our ICBM's than in the four to

12 hours it would take our cruise missiles to reach their targets.

Thus, it would be preferable to conduct such a counterattack with "slow" cruise missiles or bombers and give the Russians as much time as possible to make their decision. In fact, we would want to use that time to let the Russians know exactly what we were doing — that a counterattack of the same proportion as their attack on us was irretrievably on the way; that we hoped they would absorb it and then negotiate; and that if they fired one more missile at the United States, our entire remaining arsenal would be immediately launched in a devastating blow. This would provide more margin for reason to reassert itself than would the momentum of a war-fighting strategy, which would propel us both into successive rounds of nuclear exchanges and would probably lead to mutual, if not global, destruction.

It is folly to talk, as the war-fighters do, of prolonging intercontinental nuclear exchanges until the Soviet side was exhausted. Of what value would it be to us to have some nuclear forces left after 8,000 nuclear warheads have been fired in each direction? Neither nation would be thinking of "victory" after sustaining 8,000 nuclear blasts, each 10 to 100 times more powerful than the one at Hiroshima. In fact, long before anything like 8,000 weapons had been exploded, a nuclear war would become entirely unmanageable. It is interesting to note that prior to his recent retirement as chairman of the Joint Chiefs of Staff, Gen. David C. Jones said publicly that he did not consider protracted nuclear war feasible. It is largely civilian nuclear theologians like Colin Gray who do.

There is another line of reasoning put forward by the war-fighting school that may be paraphrased as follows:

"The forces of NATO and the Warsaw Pact that face each other in Europe are armed with conventional weapons, and our side has always been outgunned. We have tried to compensate by placing short-range 'tactical,' or battlefield, nuclear weapons behind our conventional forces, in case we needed to make a special effort to turn the tide of battle. In turn, we have always backed up these tactical nuclear forces with the threat that our ICBM's in the United States would enter the fray, if necessary. Hence, these intercontinental forces of last resort must be capable of war-fighting, including quick response."

The argument is pure sophistry. If, in the event of a nuclear attack against the United States, the President's readiness to retaliate against Soviet cities lacks credibility, as the war-fighters contend, what makes them believe that the President would attack the Soviet Union with nuclear weapons in retaliation for a conventional attack on Western Europe? The United States certainly should not and would not expose its own cities to nuclear devastation in order to compensate for NATO's weaknesses in conventional forces. It should be clear that if the West's conventional defenses in Europe ever reach the point where they cannot stand on their own, the Russians will soon detect that, and we can expect troubles that a "nuclear war-fighting capability" could not counter.

□

This examination of our strategic problems leads, I suggest, to the following conclusions:

We need weapons with a high degree of invulnerability to enemy attack, so that a large part of our deterrent can be depended on to survive a Soviet strike of no matter what intensity. These weapons should be able to retaliate in a deliberate, preferably slow, manner against either hard military targets or soft targets, including ordinary military installations, as well as cities and industries. We should have enough of these weapons to be certain of being able to inflict an unacceptable level of damage on the Soviet Union, but not necessarily to match the Russians weapon by weapon.

In other words, we must recommit ourselves to a doctrine of assured retaliation, relying principally on submarine-based missiles, bombers and cruise missiles, and rejecting the MX as unsuited to our needs. And we must reject the nuclear war-fighting doctrine as misconceived and dangerous to our security.

It may seem curious that a war-fighting theory with such lapses in logic should have gained such credence in the United States, and that, as a result, we are on the brink of going ahead with the MX missile at great financial cost and at great risk of nuclear instability. Yet the reasons are not hard to identify.

Perhaps the main reason is that war-fighting theorems are in accord with normal military reflexes in war, which are to strike quickly at the enemy's military forces. Another explanation lies in interservice politics: The Air Force sees the MX missile as a means of preventing its predominance in the intercontinental-nuclear field slipping away to the Navy. And there are, undoubtedly, the usual pressures from the military-industrial community to continue production of weapons under contract today.

Another factor, in my view, is that, over the years, the uniformed military in our country have virtually abdicated the formulation of nuclear doctrine to civilians. After all, military men cannot claim any particular operational expertise with nuclear weapons that has been denied to civilian specialists. It is good to have civilians thinking in all areas of military endeavor, but that there should be so few military men who can hold their own in debate on these matters is disturbing. Unrealistic

concepts like that of nuclear war-fighting are a direct consequence of this lack.

Finally, the war-fighting doctrine has made inroads into official policies because it has not had to stand the test of full-scale public scrutiny and debate. This deficiency is being corrected: The American public displayed considerable skepticism over the dense-pack scheme, and the Congress, properly responsive to the public's views, voted in December to postpone any decision on the MX. Now, with the subject coming up for resolution, a still more difficult test of our democratic process is at hand.

It is doubly important for the public to involve itself in the final judgment on whether we need the MX missile. Of course, there are many technical details and some secret matters that must be left to the experts, but the broad purposes of acquiring or forgoing specific nuclear weapons like the MX are quite within the public's ability to comprehend. In no other area today is it more important for the principle of public control over public officials to be exercised. ■

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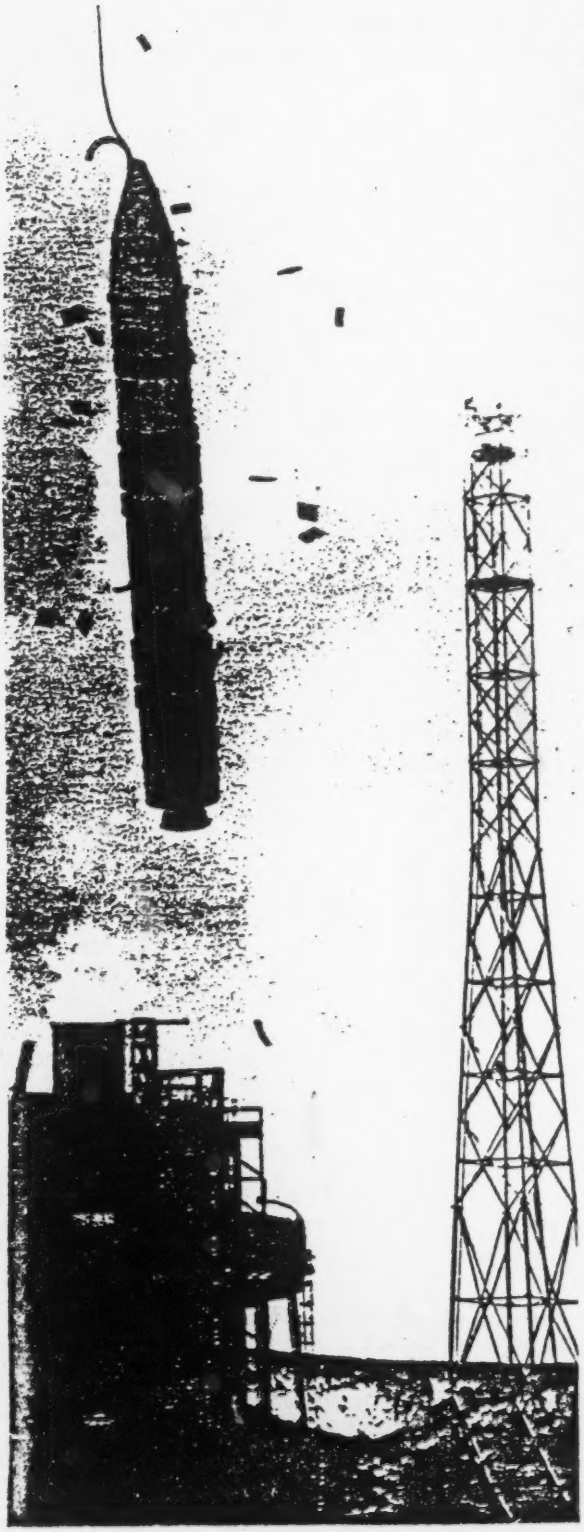

Our latest ballistic weapon, argues a former C.I.A. director, makes sense only as the instrument of a nuclear war fighting strategy whose adoption would threaten America's security.

A prototype of the MX missile undergoes a launching test. Its deployment has been held up by a search for a new basing mode.

CONGRESSIONAL RESPONSE TO SCOWCROFT COMMISSION

Admiral TURNER. First, to emphasize how critical the congressional response to the Scowcroft Commission is. I think it will be a fateful set of decisions the Congress has made on military policy since World War II, because what is at stake is whether we continue down the path we have been heading on a war-fighting doctrine or revert to a retaliatory doctrine.

On the one hand, a war-fighting doctrine is where we deliberately develop the capability to knock out all the Soviet nuclear forces that can be located and targeted and to do so as rapidly as possible once the decision has been made. On the other hand, the retaliatory doctrine, in my view, is one in which we build forces that have a high assurance of survivability in sufficient numbers to do grievous damage to the Soviet Union in retaliation against nuclear forces, conventional military forces, and nonmilitary targets. The difference betwee these doctrines as to where they lead you in force structure is for a war-fighting doctrine you must have large numbers of large land-based missiles. They have to be large missiles to have the power to knock out the hardened enemy nuclear forces. You have to have them in large numbers so you can put at least two per target in order to increase the probability of destruction, and they have to be land-based so you have the right, quick communications with them.

There are no ways that you can make this combination relatively invulnerable and, therefore, such a set of forces is really useful only under two circumstances: One, that you initiate the war, which I don't think the United States ever will do or should do; and, second, that you launch under attack, that is, in the 20 to 30 minutes of the time of flight of a Soviet missile to the United States should they initiate the war.

VULNERABILITY OF MX

Looking even beyond that and hypothesizing that a reasonable number of MX's survive if we don't initiate, I don't see the usefulness of it. If the Soviets launch first, surely they are going to be very alert to see what our response is going to be. If our response is to send a thousand MX warheads in their direction toward their surviving, remaining nuclear forces, they are going to be under tremendous pressure to launch those under an attack in the 20-to-30 minute window, which will have two results: First, it will bring further damage upon the United States; and second, it will have us attack a lot of empty holes in the ground. Thus, if we go to the MX, I believe we will persuade the Soviets we are deliberately developing a capability to initiate nuclear war. That will make us nervous because we will be moving to a war-fighting doctrine. It will also make us nervous because we will worry about the vulnerability of the MX and we will go to a launch-under-attack doctrine and posture. These moves, of course, are destabilizing.

In contrast, Mr. Chairman, if we go to a doctrine of nuclear retaliation, we depend on submarines, bombers, and cruise missiles, we forsake the capability to initiate a suprise nuclear attack, we forsake the capability to respond rapidly for sure if we are attacked first, for the reasons Mac Bundy gave—communications with the

submarines aren't rapid enough to insure quick response and the flight time of the bombers and cruise missiles is so long it gives the enemy lots of warning.

SCOWCROFT RECOMMENDATIONS

The Scowcroft Commission makes three specific recommendations. Two supported a retailiatory doctrine—the development of a small, mobile missile, which is obviously less vulnerable, and placing a single warhead on the missile, changing our arms control posture from one of counting missiles to one of counting warheads. I support both of these because they are moves toward the doctrine of retaliation. The third recommendation is to place the new MX in the old Minuteman silos. I see this as directly conflicting with the other two recommendations because it leads to a war-fighting doctrine, and I would oppose it for that reason.

The Commission adduced three reasons for this contradictory recommendation, as I see it. They were listed on the last paragraph of section 3 of the report, entitled, "Preventing Soviet Exploitation of Their Military Programs." The first explanation was that, "We remove the Soviet advantage in ICBM capability." What that is saying is that we cannot tolerate an asymmetry in capabilities for war fighting. But, Mr. Chairman, there is, I believe, an asymmetry in the willingness of the two countries to initiate nuclear war, and from that asymmetry of intent comes this asymmetry in weapons. And I think that we should, in addition, be willing to tolerate this asymmetry in weapons because there is also this asymmetry in doctrine; that is, that we should be more responsible as a nation today and not take steps that would drive the two superpowers into a deliberate hair-trigger situation that can lead to war by miscalculation. This is a responsibility that I think we can shoulder and I don't believe the Soviets ever will.

MX FOR ARMS CONTROL PURPOSES

A second reason the Commission adduced for going to the MX is "to encourage the Soviets to move toward a more stable regime of deployment in arms controls." And I think a great deal of argument here in the Congress in the next few weeks will be on the necessity of MX for arms control purposes. Let me suggest that we not confuse the objective of arms control as being reduction in arms. The primary objective of arms control is to reduce the probability that anyone will initiate nuclear war, and going to a war-fighting doctrine that places both superpowers on the hair-trigger response will do the opposite of what we want arms control to achieve. On top of that, I believe the bargaining chip theory is overemphasized, that theorem the Soviets respond only to force. What it does not consider is how much more dependent the Soviet Union is on land-based ICBM's than the United States is. It is very logical for us under the present circumstances of increasing the vulnerability of land-based ICBM's to turn to submarines, to bombers, and to cruise missiles. The Soviets, on contract, are well behind us in cruise missile technology, have never depended much on bombers, and not be a maritime power, have never wanted to count too heavily on their submarine force. Instead, they have built so

many large ICBM's that they can count on their sheer numbers to provide them survivability, and the facts have borne that out. The United States has not built enough quick response, hard target capability to knock out the entire Soviet ICBM force. If we now add 1,000 warheads on MX's and then threaten their survivability for the first time, they are not likely to agree to sit down at Geneva at the START negotiations and agree to reduce the number of their ICBM's. I agree fully with Mac Bundy. They will more likely match missile for missile, warhead for warhead, and try to retain this one sole advantage in the numerical counting of nuclear weapons which they presently enjoy. In short, they are not going to be forced into reducing the reliability, the survivability of the one element they count on for their national security.

PROTECTION OF ATLANTIC ALLIANCE

The third reason adduced by the Scowcroft Commission was to help deter the threat of conventional or limited nuclear attack to the Atlantic Alliance. This has been a long unrealistic and dangerous doctrine. It says the United States would be willing to launch nuclear attacks on the Soviet homeland if NATO were losing a conventional war in Europe. I think it is very questionable that we would in fact do that. Beyond that, I think it is dangerous because it tells our European allies this is how we are going to defend you, you do not really need to build up your conventional forces so we are never placed in a position of losing a conventional war in Europe and having to face this decision would we launch nuclear weapons against the Soviet Union.

Finally, Mr. Chairman, not in the Scowcroft report but I think being used today by the administration in support of the Scowcroft recommendation on MX, there is an argument, which I think is a reasonable argument, that we would be vascillating if we cancel the MX and do nothing else. My personal recommendation to the Congress, sir, would be that, in rejecting the MX, the Congress also direct the President of the United States to initiate and accelerate the cruise missile programs, leaving it to the executive to come back to you with recommendations on the specific ways on submarines, on bombers, on land launcher to surface ships, on railroad cars, or whatever, but to take a positive, affirmative action which would strengthen the hand of the negotiators in Geneva without forcing everybody to a hair-trigger response, and which would show the world that we are determined to maintain a survivable retaliatory force that will assure against the initiation of nuclear war rather than drive us to it.

Thank you, sir.

Chairman HATFIELD. Thank you, Admiral, Mr. Bundy, we appreciate both of you gentlemen coming here this morning, as I say.

I am going to pose a question and I would invite either or both of you to respond.

WINDOW OF VULNERABILITY

For a number of years, the Congress and the public generally have been informed that there is a serious need to redress what has been referred to as the imbalance between the Soviet Union

and the United States ICBM forces and close what has been referred to as a window of vulnerability. The President's Commission states, as I understand it, that the vulnerability of existing silos is near term, viewed in isolation is not a sufficiently dominant role or a part of the overall problem of ICBM modernization.

Now, my question is, can you enlighten me and the committee as to the rationale for what I read or what I understand to be a radical departure from the previous thinking, that is, that the window of vulnerability is to a near-term problem for near-term ICBM modernization?

Mr. BUNDY. I think this is the real contribution, if I may speak to the point, that the Scowcroft Commission has made, because it is true that we have had talk about a window of vulnerability, specifically, a window of vulnerability of the Minuteman force, for a number of years, going back I think to the mid-1970's when Ambassador Nitze led the way in pointing out what he thought was an eminent danger. I think the answer given by the Scowcroft Commission is correct, that while it is true that taken in isolation the Minuteman force is increasingly open to a surprise attack on itself alone, or a preemptive attack of some sort, it is also true that you can't do that if you are a Soviet planner and at the same time deal with either the quick alert bombers or the submarine force. And there is no way that you can with current Soviet forces attack simultaneously by surprise the bombers, because you need a short lead time to do that if they are not to escape that, and submarines. Soviet attacks can't synchronize with an ICBM attack on the Minuteman in a way that gets them both at once. That is a correct assessment, and one that has been apparent to analysts for many years and now is apparent to the administration, I am happy to say. So I think it is fair to say that the window of vulnerability of Minuteman is not a serious element in the long-run problem of building a stable strategic force.

I don't know whether that responds to your question.

Chairman HATFIELD. Yes.

COMMITMENT TO MODERNIZATION

We also hear that we must do something to demonstrate sufficient commitment to modernize that would induce the Soviets to negotiate. My question to you is do you believe that absent the proposal to deploy 100 MX missiles, that the administration's program to include two new strategic bombers, 15 Trident submarines, 3,000 air-launched cruise missiles is sufficient modernization to impress the Soviet Union?

Admiral TURNER. Mr. Chairman, it was sufficient to bring them into serious negotiations for a number of years on SALT II. Second, the fact that we are here today, Mr. Bundy and myself, strongly opposing this deployment, many Members of Congress on record as opposing it, seems to mean that this isn't a very strong bargaining chip. The Soviet Union is not going to give you much for something they may think you never will follow through on. Regardless of what the Congress does, the Soviets will remain skeptical; we will pursue the MX to the end of the full deployment.

Mr. BUNDY. Just one supplemental comment on whether the Soviets are impressed. I think it is clear that it is, in the first instance, the other programs of modernization that are impressive to the Soviets. We don't have, and never do get before you really do get into serious negotiations, hints of the Soviets' position, but those hints suggest strongly they are much more impressed by the Trident II program and by the cruise missile programs than they are by MX, because the submarine programs and the cruise missile programs pose threats to them in fields in which they are well aware that we have technological advantages and developmental advantages.

Admiral TURNER. Could I add two other thoughts here quickly.

Chairman HATFIELD. Yes.

PERSHING II DEPLOYMENT

Admiral TURNER. I agree entirely with Mac, and what they really are concerned with in the Soviet Union is the potential of our technological capability to develop something we haven't even talked about yet which will be a threat to them. Beyond that, we have a bargaining chip today of great value, one that really has the Soviets climbing up the wall, and that is the Pershing II deployment into Western Europe, with very, very short times of flight to the Soviet command control system. We are about to bargain that away, I believe, for some reductions in SS-20's, and I believe that is a foolish move for the United States of America.

First of all, the SS-20 is only one of thousands of threats to Western Europe. It happens to be a missile that was built with a label on it intended for Western Europe only, not capable of reaching the United States, and it has driven the Europeans up the wall. But when they get a reduction in SS-20's and confront the reality of life, it is the Soviet Union which retains after that more than ample capability in other feasible requirements to devastate Western Europe. We should, I believe, merge the INF and the START negotiations so as to put the Pershing missiles as a bargaining chip against further MIRV's, against whatever other reductions in intercontinental weapons that threaten the United States as are necessary. We are going to bargain this away for a psychological whim of our European allies and not do them any good in the process.

INTERIM MODERNIZATION EFFORT

Chairman HATFIELD. Gentlemen, as you recall, last year the proposal that is being offered today was firmly rejected by the President, the Secretary of State, Secretary of Defense, Members who served on this Commission, as well as key Members of the Senate. Rather than be rejected, I should say they all expressed very strong reservations about this proposal. Now we get it before the Congress as an interim modernization effort.

My question to you is what are we really buying with this interim scheme to deploy 100 missiles instead of, say, 200, and is it possible to leap frog this Minuteman idea and sustain our strength until the Midgetman is ready, or could you suggest a modification to the existing Minuteman system that would get us through the time gap or time lag, and can we stop just 100 or 200?

Mr. BUNDY. I think we both said in our prepared statement, Mr. Chairman, that we don't think there is a crying need for this system on any careful analysis of our strategic nuclear capability as they are and as they are emerging. This system at the best cannot be operative. IOC is said to be December 1986. I have some skepticism as to whether the December date is likely to slip or not into 1987. It is only 2 years from there to the first capabilities of the Trident II, if I understand the deployment schedules right, and the existing deterrent strength of the United States in the intervening years is more than ample. You can if you want to upgrade the accuracy of the Mark 12–A warheads and Minuteman III missile now. The Commission recognizes that possibility and simply says it seems unwise to do it with older missiles. I think that reflects, as does the pressure for MX, and old-fashioned attitude toward the reasonable lifespan of good systems. We think that they are out of date. The President tells us in one voice that the B–52's are older than the pilots, but the Secretary of Defense tells us in his annual report that the B–52's being held in service will be effective well into the 1990's. Maybe no logical contradition comes through there, but there is a psychological difference there, as between the President and the Secretary.

And the Minuteman is almost 20 years old. I was in the Government when we first deployed the Minuteman. We were properly proud of it then because of its combination of strength and survivability. It has done very well for 20 years. Every report I have seen suggests that there is no difficulty in keeping the Minuteman system in active service for another decade, and the Mark 12 can be made still more accurate if that is needed.

Chairman HATFIELD. Senator Proxmire.

Senator PROXMIRE. First, Mr. Chairman, I want to commend you on the witnesses. I think the witness list you have for today, tomorrow, and Thursday is balanced and excellent. These two men I greatly admire. I had the occasion to call the attention of the Congress to both of their excellent statements on this issue in the past and in putting them in the record.

TRADE OUT OF MISSILE SYSTEMS

Mr. Bundy, I don't want to repeat the questions that the chairman has asked, but I am not clear on your position. You say on page 2 of your statement,

> The only possible use of MX-in-Minuteman as an element in arms control policy would be as a program to be traded out, together with the emerging Soviet MX, in some kind of a no-new-MIRV agreement.

Precisely what is wrong with that? I think Admiral Turner has answered that question from his standpoint, but I would like you to. What is wrong with that kind of a trade-out?

Mr. BUNDY. I think nothing is wrong with that trade-out. I think it makes good sense.

Senator PROXMIRE. Don't we have to build it to have it to trade out?

Mr. BUNDY. They have to know that they might, that is right.

Senator PROXMIRE. Then isn't that part of the Scowcroft Commission report legitimate?

Mr. BUNDY. I think, Senator, the difficulty in the Scowcroft Commission's report is that it talks about using MX's in Minuteman to encourage the Soviet Union to move away from all MIRV'ed ICBM's, and that is a very different thing from a limited agreement for neither side to build a particular new system. It is just a big difference in what you are demanding of the Soviets in those two cases.

Senator PROXMIRE. Well, I am not sure I understand it. You are arguing, then, that we should not go ahead with the MX as the Scowcroft Commission recommends in the Minuteman?

Mr. BUNDY. I, personally, think it adds very little, and the only value is the one you are now driving at, Senator, namely, that I would think it would make very good sense for the administration, which really in arms control means the President, to send his negotiator to the Soviet Union and say, "Look, we have this system we can build. You have one. You have already made a test. Why don't we both agree that there is no profit for either side in the long run. The Scowcroft Commission says in these MIRV'd land-based missiles they are dangerous and vulnerable. So why don't you consider you could give up your new MIRV'ed ICBM's," shorthand for Soviet MX, "and we could give up ours." That is a workable trade. At least it has a fighting chance. And I am distinguishing it from a general effort to say, "Look we are going to build 100 MX's and you have to throw out your SS–18's."

Senator PROXMIRE. I understand that. But it seems to me that this is the Appropriations Committee and must be prepared then to move ahead so we will have this bargaining chip available. Is that right?

Mr. BUNDY. I think I would certainly try it, Senator. I wouldn't commit forever as to whether you would then build. Obviously you have to support the bargaining while serious bargaining is going forward. We don't yet have any sign on serious bargaining material for something reasonably achievable, in my judgment.

MIDGETMAN SYSTEM

Senator PROXMIRE. You also, I think both of the witnesses, favor the so-called Midgetman. You in your excellent article, "MX Paper: Appealing, But Mostly Appalling" is the headline on it——

Mr. BUNDY. I didn't do that

Senator PROXMIRE. You praise the Midgetman as a proper initiative because it would be less threatening and less vulnerable. My question is, in the first place, we have been told it would cost $100 billion; in the second place, we are told it is about 10 years away, maybe not 10 years, but close to 10 years; in the third place, doesn't this represent a further escalation of the arms race? Aren't we just proceeding, moving ahead, building additional missiles and provoking the Soviet Union to do the same?

Mr. BUNDY. I think they are all good questions, right questions, Senator. I think I did say in endorsing the study of the development of this missile, we needed to be careful about its cost and its value. I perhaps should have added what the Scowcroft Commission, I think, and others, notably Harold Brown, have remarked, namely, that a single warhead system land-based, however skill-

fully designed, is not going to give you overall stability absent some kind of limit on warheads, some kind of arms control framework, simply because a sufficiently large Soviet force could always overwhelm I think nearly any conceivable land-based system by barraging the system. Those things are possible if you don't have a limit on overall strength.

AIR FORCE SUPPORT OF MINUTEMAN

Senator PROXMIRE. With your long experience in the bureaucracy, would you say that the deployment of the MX in Minuteman would be the kind of attractive weapon as far as the Air Force is concerned that would tend to crowd out the possibility of moving eventually to the Midgetman system that is farther away?

Mr. BUNDY. I think that is an appropriate question, and one should be skeptical I think about enthusiasm for systems that are proposed from outside any given service, and there isn't any doubt that the enormous momentum behind the MX derives in very large part from the longstanding and deepseated commitment of the Air Force to this particular missile.

CRUISE MISSILE PROGRAM

Senator PROXMIRE. Admiral Turner, you say that we should initiate and accelerate the cruise missile program. I think the cruise missile certainly has great appeal in all considerations. It is more economical. It certainly is a system which should be able to work vis-a-vis the Soviet Union because they have heavily defended air space, and so forth. But doesn't this again propose a stepup in the arms race? How would you view this as an arms control initiative?

Admiral TURNER. Again, Senator, I think we have to come back to the fundamental, that the objective of arms control must not be made to be reductions in numbers of arms, it should be selective reductions and selective controls to avoid the potential of either side feeling they would gain by initiating nuclear war. Arms control of cruise missiles is, in my view, very shakey, that is, trying to control the numbers of them because they are so small and concealable. I would much prefer a world, however, in which there were lots of cruise missiles that gave each side a sense of assured retaliatory capability on deterrence than I would in one in which we ban the cruise missile and other unverifiable weapons and relied solely on these big missiles that can be checked on and which would put us to a hair-trigger posture.

REACTION TO CATHOLIC BISHOPS' STATEMENT ON DISARMAMENT

Senator PROXMIRE. Where does that lead us? I would like to get your reaction to the statement by the Catholic bishops that, they argue, the only justification for producing and deploying nuclear weapons is to negotiate arms reduction. They say disarm; but arms reduction? What is your reaction?

Admiral TURNER. Senator, philosphically, I believe that the nuclear-freeze movement, the Catholic bishops' movement, the other antinuclear movements in this country, are all will-o'-the-wisp hopes that we can somehow put the genie of nuclear weapons back

in the bottle, and I would love that, too, but I believe it is totally impractical, that you and I and our children are going to live their lives in a world of a delicate balance of nuclear terror, and the best we can do to assure our children and grandchildren survive in this is to build a regime in which the incentives to use those nuclear weapons are reduced and not try some will-o'-the-wisp scheme that is going to eliminate nuclear weapons over the face of the Earth, because it will not happen, in my judgment, nor will we be able to control invention and improvement in nuclear weapons entirely.

Senator PROXMIRE. But if we don't try to move in that direction, what hope is there?

Admiral TURNER. We try.

POSSIBILITY OF NUCLEAR MISTAKE

Senator PROXMIRE. Isn't it almost inevitable with the tremendous advance of nuclear technology we will end up one day or another with a nuclear mistake, with a mistake that will result in nuclear holocaust, proliferation, and so forth?

Admiral TURNER. Well, I think you try to minimize that possibility by reducing those kinds of weapons, controlling those kinds of weapons and procedures that could be used to start a nuclear war to someone's advantage. You are not going to be able to control every nuclear weapon around the world. So what you try to do is control those that are most likely to lead to the use of nuclear weapons. Those are the big, quick reaction, surprise attack kinds of weapons. And you face your fate that you can't control them all, but you also try to establish various procedures to reduce the possibility that anyone will initiate a nuclear war.

Senator PROXMIRE. Thank you.

Chairman HATFIELD. Thank you, Senator.

Senator Rudman.

Senator RUDMAN. Thank you, Mr. Chairman.

I will address this question to either of you and ask you either decide who will answer it or answer it together.

SOVIET DEVELOPMENT OF PL–5 MISSILE SYSTEM

Article IV, paragraph 9 of SALT II allows each of the superpowers to deploy a major new missile system. Ours, of course, is the MX. The Soviets are in extensive flight testing of theirs, which I believe we have dubbed Pl–5. There are indications of at least one other new missile. There are further indications of possibly two others beyond that. All land based, following the general doctrine of the Soviets for building heavy land-based forces.

Do you believe that if we do not go ahead with the MX, that that will have any effect on their deployment of their new Pl–5, or call it what you wish?

Admiral TURNER. If we don't deploy the MX, I think it may reduce some of the Soviet incentive there. I think Mac and I have both said if we deploy the MX, they will almost certainly have to go there to keep their numbers ahead of our potential for first surprise attack. But I would certainly agree that the Soviets are likely, regardless of what we do, to deploy one or more of those

missiles. I think that is the pattern we have seen in the Soviet Union of progressive, continual improvement and replacement.

Senator RUDMAN. Of land-based forces?

Admiral TURNER. Yes.

Again, going back to my comments initially, Senator, they do not yet see their way clear to finding a way around that. Perhaps the talk—and I don't have any access to classified information—that they are beginning to move back toward an SS–16 mobile ICBM, which I think would be a good move in the sense it would begin to make them dependent upon missiles that are less vulnerable, therefore they don't feel as nervous about the threat of a first attack, that might be the direction that they could and should go in our view in order to reduce dependence on missiles for surface attack.

NO-NEW-MIRV AGREEMENT

Senator RUDMAN. But the present facts certainly are they will probably deploy what they are allowed to deploy under SALT II in a new, heavy MX equivalent. Certainly they are going to do that if we go ahead with the MX. What you are saying is this is your view, maybe in your collective judgment. I would like to hear from you, Mr. Bundy. Is there a chance, if we decided not to deploy the MX, or to authorize it, contingent on arms reduction, that they might not deploy their new system, which I think we all would agree would further add to instability.

Mr. BUNDY. I think, Senator Rudman, there is a chance of what for shorthand one might call a no-new-MIRV agreement. Both sides in SALT II negotiations made proposals about not having a new missile. I think it would be really quite reasonable, hopeful, to open that discussion while the question of the future of the MX is not finally decided so you have something to talk about.

SCOWCROFT COMMISSION CASE

Senator RUDMAN. Let's just move back a step then. There are really three linchpins on which the Scowcroft Commission rests its case. I find very little agreement amongst experts on either side of this that deploying 100 MX in Minuteman holes will add in any way to a quantum leap in Soviet deterrence. I assume you both agree with that.

Mr. BUNDY. We agree with that.

Senator RUDMAN. Second, there is a discussion that failure of the Congress to authorize MX could adversely affect the deployment of the Pershing II, which is probably one of the most effective bargaining chips we have. Could you comment on that part of the discussion?

Mr. BUNDY. I will be delighted to comment.

There are many who say we need to go ahead with MX so as to keep up with the European will to go ahead with Pershing II and the ground-launched missiles that are part of the two-track program, and I am sure there are people in Europe who say that. I don't myself think it is a compelling argument. There is a big difference between these systems, at least in principle. Ground-launched missiles and Pershing are survivable, are mobile, can be

deployed in ways that make it hard to take by surprise. Minuteman simply doesn't meet that standard. I think that, myself, it is perfectly possible for the American Government to make clear to the government which is modernizing its bombers in four ways, modernizing its sea-borne deterrent in two very important ways, if you want to modernize the Mark 12–A's still further by guidance and changing its entire approach to command and control, which is absolutely critical in our ability to support Europe, is not weak in deciding that a particular, specialized recommendation doesn't really serve the purpose. I have always believed that the question of the deployment in Europe is fundamentally a European question, for the reasons Admiral Turner has already mentioned. The overall strategic threat to Europe doesn't change if the SS–20's all go away that can reach Europe in minutes from the Soviet Union.

Senator RUDMAN. If we can move ahead in the few moments I have left.

ARMS REDUCTION AS NEGOTIATING CHIP

The third leg of the Scowcroft report is on its value in terms of arms reduction as a negotiating chip. I think your collective position on that in hearing your answers to Senator Proxmire and to our chairman tends to be that that is a possibility, but you really are no more sure than we are as to how to assess that.

Mr. BUNDY. And certainly it is not large enough so that you can set it up against the whole Soviet ICBM force. It will be lucky for both sides if you get this limited agreement on no new MIRV.

Senator RUDMAN. I have 2 minutes remaining.

I would ask again either one of you might answer this.

First, do you believe that it might be in the best interests of what we are all trying to achieve here for the Congress to authorize the MX in some contingent way, tied to disarmament discussions on a no-new-MIRV agreement,

Admiral TURNER. Certainly the least undesirable way, Senator, but it makes it a very weak bargaining chip in the process.

Lastly, let me supplement Mac's answer to the previous question, if I may, which is directly related to this, and that is I think the Congress must weigh the cost of establishing MX as a bargaining chip. Let's assume it has some bargaining value. I assure my fear is it will be like so many other Pentagon programs. You won't stop at 100 no matter what the Congress says in 1983, we will go on and on. As I tried to emphasize in my opening comments, this drives us in a whole doctrinal direction which is destabilizing and dangerous and does not make us stand out to the world as a responsible power who is willing to wield power in a responsible way as opposed to a destabilizing way.

Senator RUDMAN. Could I have 1 more minute, Mr. Chairman?

Chairman HATFIELD. Yes.

SOVIET EMPHASIS ON LAND-BASED FORCES

Senator RUDMAN. Gentlemen, you have stated very clearly something that certainly many recognize, and that is that the Soviets have put their emphasis on land-based forces. We have a wide diversity. Our triad in many ways is certainly an active and working

triad, at least for the sea forces and air forces. That being the case, and assuming that we were to refuse to approve the funds for MX, which I think is a possibility, how probable I don't know, would you think we ought to vigorously support continued deployment of 100 B-1's, continue deployment of the Tridents planned, and development of the Midgetman and Stealth?

Mr. BUNDY. Well I have to take a reservation to the B-1. I think the cruise missiles, the upgrading of existing B-52's, and the development of the Stealth bomber are adequate for that leg of the triad. But with that reservation I would agree with your question.

Admiral TURNER. I would with one further caveat, and that is you explore in the Air Force very thoroughly whether the B-52's just won't survive. As a military man, I know the problems of operating old equipment. I can't personally judge whether those airplanes are that——

Senator RUDMAN. I have been involved in doing just that in the last 2 years.

Admiral TURNER. Fine.

Senator RUDMAN. Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Senator Rudman.

Senator Sasser.

DEPLOYABILITY OF MX

Senator SASSER. Thank you very much, Mr. Chairman.

I want to commend the chairman for convening this hearing this morning. I think it is exceedingly important that we get a contrary view on whether or not the MX system ought to be deployed, and even more important in view of the statement, the assertion made in Mr. Bundy's statement here, and I am quoting it: "It is not secret that both the Commission members and its counselors were screened in advance, with support for the MX as a requirement," I assume before they were asked to serve on this Commission. Mr. Bundy goes ahead to say that does not question the sincerity of the Commissioners and the senior counselors who endorsed their works, nor do I, but there are many who would make the case that, although they are sincere, perhaps they likewise are mistaken. So I want to commend my chairman for convening a contrary point of view this morning.

I have been listening to this MX controversy with interest now for some years. First, the assertion was there was a window of vulnerability that could be closed only with building a new, more powerful ICBM in a basing mode which would make that new ICBM invulnerable. Well, now the Commission is saying that, partly for political reasons, we are abandoning the concept of trying to come up with a basing mode that is invulnerable, but still, even though the window of vulnerability can't be closed—and I was interested to read just that admission by the distinguished chairman of the commission—that even though the window of vulnerability can't be closed, which was the initial reason for building this missile, that we should go forward with the construction of it because it would give us some utility through the early 1990's by increasing our deterrent capability and by showing a national will and cohesion to

resist the Soviet Union, and also to keep up with the spirits of our European counterparts.

The question I would like to address to both of these distinguished gentlemen here today is, would you support the MX missile if this missile could be put in a less vulnerable basing mode? You don't support MX in Minuteman. What would be your reaction to the MX if we could come up with some hypothetical basing mode that would make it invulnerable to a first strike?

Admiral TURNER. That is a very hypothetical question. But it certainly was tried and failed. I would still not favor the MX because of the emphasis I have been placing throughout this hearing on the undesirability of posing a first-strike disabling threat against the Soviet Union in the long run because of the view I expressed to Senator Proxmire. We are not going to do away with nuclear weapons or reduce their number so substantially that they are not a very significant problem. In the long run, what we want to do is reduce this potential for a surprise disabling attack which might tempt someone to use these things. So the more we both go to systems that are not only invulnerable but don't have the potential of surprising the other person, the other country, I think the better off the world will be, as long as we can maintain our national integrity and interest with that—and I believe we can. That is, of course, a given.

Mr. BUNDY. I think it is a hard question but a very good one. As I look back on my own attitudes, I remember I was a supporter of MX in the multiple protective shelter mode during the later years of the Carter administration because, while I agree an immediate hard target kill capability has some of the risk that Admiral Turner speaks of, nonetheless, if you could have a genuinely survivable force which could thereby withhold in any crisis and would survive any attack in the land-based missilery, that is what the Midgetman would be if it proves practical and works and if the limitations that would make it survivable can be achieved. So I think my answer to your question would be yes, if I thought they could really make it survivable, I would be for it, and I was.

DESTABLILIZING EFFECT FROM BUILDING MX MISSILE

Senator SASSER. Mr. Bundy, I think in your statement you may have had an assertion as to why the building of the MX missile would be, in your view, destablilizing. I didn't have an opportunity to hear you testify on that. Would you amplify on that?

Mr. BUNDY. I think it is only moderately destabilizing and has only very limited value. If you build 100 and have only 1,000 warheads, I don't think you then create an overall threat to the Soviet ICBM force. You certainly raise the risk to it. Where I think danger becomes very serious is if you contemplate, as in some places the Scowcroft Commission seems to, going to the next 100 missiles, and possibly beyond that, because by the time you have, let us say, 200, 300, or 400 MX missiles, with 2,000, 3,000, or 4,000 warheads, then indeed you have an instant knockout threat to the main Soviet force, and you would create a situation that would be rather like if our force today were the same as the Soviet force. It is a very fortunate thing for the world that it is not, because that

would mean that you had two large, first strike, hair-trigger forces facing each other and the chance that in some moment of crisis one would think his best way out was to preempt would be very much greater than it is today.

So I think one of the most important things that the Congress can do in thinking about this proposal is to ask very sharply whether there is any plan for enlarging the 100-missile force or whether it is possible to get a very serious treaty that, even if approved, this is all it will be.

Senator SASSER. Well, General Scowcroft may have already answered that question. Reading an interview by some national publication just the other day, as I recall the interview, he indicated that it might be necessary to go beyond 100 MX missiles if we couldn't get an agreement with the Soviet Union. He clearly stated that.

One final question, Mr. Chairman.

CONDITION OF CURRENT MINUTEMAN FORCE

Mr. Bundy, you indicated that the Minuteman has been in service now for almost two decades and, in your judgment, could serve the purpose for which it was intended until such time—and I may be putting words in your mouth here—until such time we came on with a small Midgetman missile. Am I correct in that statement?

Mr. BUNDY. I think that is what is indicated both in the Scowcroft report and in other Pentagon reports about modernizing and upgrading the Minuteman force.

Senator SASSER. General Scowcroft, as I recall it, was asserting many of the Minuteman missiles now are in poor condition, some of them the cases are splitting on them, and indeed it is going to be necessary to overhaul a large portion of the Minuteman force at a very considerable expense, perhaps half as much as building a new MX fleet. Are either one of you familiar with that assertion?

Mr. BUNDY. I certainly don't have the technical or detailed familiarity. I think it is perfectly clear it is the plan of the Air Force, endorsed by the Scowcroft Commission, to keep—even if you put in the 100 MX, you take out 100 Minuteman III's, you still have a 950-missile force or a 900-missile force—and the intent is to keep that as near 100 percent operational as possible. I believe that they can do it.

Admiral TURNER. My experience, sir, no matter what the financial calculations show in advance, starting a new military program is always more expensive.

Senator SASSER. You might have been reading the Spiney report, Admiral.

Mr. Chairman, if my time is up, if I could just be allowed 15 seconds more to be sure I don't miss these distinguished gentleman.

Chairman HATFIELD. Sure, go ahead.

RELIANCE ON MINUTEMAN ICBM

Senator SASSER. As I understand, what you are saying to this committee is that you think we would be better off to rely on the Minuteman ICBM, to rely on the other remaining two legs of our nuclear triad, and until we can bring on line the new Midgetman

missile, rather than going forward at this time with building an MX missile.

Admiral TURNER. I would go even further than that. I would say our end objective is to dispense with all the ICBM's, and it is only a question of phasing; that is, we should not build the MX to start with. We should phase out the Minuteman. And as soon as we feel confident that our retaliatory doctrine is safely grounded in whatever other forces that we have, and at that point if we did feel so before 1990, we should not go ahead with the Midgetman. But that is a question of psychology really out there. We have plenty of nuclear force, plenty of retaliatory force, in my opinion, without the Minuteman today, but I don't think we could dispense with it today for psychological reasons.

Mr. BUNDY. With a very modest reservation to the possible limited bargaining value of our current readiness to go ahead, I agree with your proposition.

Senator SASSER. Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Senator Sasser.

Senator Kasten.

Senator KASTEN. Mr. Bundy, you have made it clear that you are opposed to the deployment of the MX missile, but in the New York Times article on April 17, you also say, "If we can buy long-term ICBM surviviability for a sensible price, we should indeed have it, and the most promising possibility is a smaller single-warhead missile, as thoughtful students have been saying for quite a while."

Mr. Chairman, I ask that the entire New York Times article be placed in the record.

Chairman HATFIELD. It will be inserted in the record at this point.

[The article follows:]

THE NEW YORK TIMES, SUNDAY, APRIL 17, 1983

MX Paper: Appealing, But Mostly Appalling

By McGeorge Bundy

Last week the Scowcroft commission published what is at once one of the best and worst state papers of the nuclear age. Unfortunately, it seems possible that the best parts will be less appealing to President Reagan than the worst. It is obvious from the elaborate White House orchestration that the report has been constructed with built-in Presidential approval and that at its core it is a selling job for the wrong missiles in the wrong place — 100 MX missiles in Minuteman silos. This solution has been repeatedly reviewed and rejected both by Congress and by the executive branch over the last 10 years.

But let us begin with the good parts. First, the report deliberately and correctly destroys one of the principal myths on which Mr. Reagan campaigned in 1980 — the myth of the "window of vulnerability," or the threat of a Soviet first strike on Minuteman silos. Growing Soviet missile forces with growing accuracy, it was said, would allow the Russians to knock out nearly all those silos early in the 1980's and the President would not dare respond because our cities would still be hostage. It was an unreal but chilling scenario, and until last week no one around Mr. Reagan had ever questioned it in public. Now the commission has given it a fitting burial. The commission observes that a "massive surprise attack" on our 1,000 Minuteman silos would be a very special case and concludes: "To deter such surprise attacks we can reasonably rely both on our other strategic forces and on the range of operational uncertainties that the Soviets would have to consider in planning such aggression." Thus, the window of vulnerability is slammed shut on the fearful fingers of the Committee on the Present Danger.

The commission puts one condition on this conclusion, and again it is a good one. The vulnerability of the Minuteman, considered alone, is real if uncertain, and it does raise a serious long-range question, because our bombers and submarines may not always be as survivable as they are now. If we can buy "long-term ICBM survivability" for a sensible price, we should indeed have it, and the most promising possibility is a smaller single-warhead missile, as thoughtful students have been saying for quite a

It destroys the 'window' mythology

McGeorge Bundy was Special Assistant for National Security Affairs to Presidents John F. Kennedy and Lyndon B. Johnson. He was chairman of the General Advisory Committee of the Arms Control and Disarmament Agency from 1979 to 1981.

while. The recommendation for careful research and development on such a new missile deserves full support.

A third good basic recommendation is allied to the first two: It is that we should seek to shift the counting rules of strategic-arms control from launchers toward warheads. This good idea is a belated but entirely sensible effort to deal with the destabilizing effects of MIRV's (multiple independently targetable re-entry vehicles) — that is, many warheads on one missile. MIRV's are the United States's worst single contribution to the nuclear arms race. What they did, as many warned at the time, was to give the attack an advantage over the defense, because a multiple-warhead missile can "kill" several opposing missiles in one shot, while it takes at least two single-warhead missiles to "kill" even one similar weapon with assurance.

SALT, for reasons of verification and habit, counted mostly launchers, not warheads. This way of counting strengthened attachment to MIRV's on both sides, because if you can have only so many missiles under an agreement, why not pack them with as many warheads as you can? We were firstest with MIRV's, but the Russians have been mostest, and the commission is right: It is time to go to work to change the counting rules. The commission is also right when it notes that some of Mr. Reagan's proposals in the strategic arms talks in Geneva move in the wrong direction on this score.

So far so good. What is wrong? Only the centerpiece of the report. It goes in exactly the opposite direction by placing the first-strike multiple-warhead MX in Minuteman silos, right where Soviet MIRV's could knock it out if ever the Kremlin thought we were about to use it. Because the MX has 10 warheads, not the two that is the average in the Minuteman force, it will be five times as vulnerable, warhead for warhead, as Minuteman itself. It violates the fundamental rule first laid down in the Eisenhower Administration: The object of any new strategic system is to deter, and to deter safely it must be able to survive.

If there was ever a "use it or lose it" system, ill-designed for stability in crisis, it is this one. Yet it comes to us from a commission that elsewhere tells us that "stability should be the primary objective." A system of this kind is open to only one protective device, a capacity for launch-on-warning — for rapid firing on possibly fallible electronic notice of an incoming attack. But on this critical point, the commission is alarmingly silent. It would have done better to recognize more candidly its deliberate abandonment of our most important single standard for strategic force planning.

The arguments offered directly for this strange choice are thin. We need it to induce Soviet acceptance of new arms control limits, says the commission. But as the commissioners recognize, the Russians are already testing their own MX and their own single-warhead missile. The Soviet answer to new programs will be new programs, not new concessions. If the commission wants a no-new-MIRV agreement, which would make good sense, it should propose just that. It should not pretend that the MX in Minuteman silos is arms control in disguise. Nor should it compare this problem with that of the antiballistic missile defense treaty. The Russians joined us in curbing ABM systems precisely to insure the deterrent effectiveness of their land-based missiles. They are not going to be driven to sea by MX. The whale will not convert the elephant by imitation.

Most of the commission's other direct arguments are thinner still. If we do not deploy MX, it says, the Russians will doubt our "national will and cohesion." Is honest disagreement on hard choices a sign of weakness? A commission of Americans should know better. But our existing land-based intercontinental missile force is aging, says the commission. So it is, but as the commissioners recognize in the very next sentence, the necessary programs for keeping this

force effective are already in train. But, they argue, we need a hedge against possible Soviet antiballistic missiles. Is the commission suggesting that our existing 10,000 warheads could not be programmed for this task? But, it says, we need a new booster as a backup for the space shuttles. Well, if we do, we do. But is this a serious argument for 1,000 new first-strike thermonuclear warheads?

But it sells the wrong missiles in the wrong place

The real purpose is different, but the commission wraps it in jargon. The main reason for this recommendation is that a commanding majority of its authors want these first-strike weapons because the Soviet Union has them. Never mind their contribution to instability in crisis; never mind what the Russians will build in reply; never mind what else you could do with $15 billion; never mind the fact that the Russians do not have a true first-strike capability because the window of vulnerability was never open; never mind that Soviet advantages on land are fully matched by our superiority in the air and under water. Because the Russians do have weapons that can strike first at hard targets, the commission concludes that we must have them, too. When you disentangle all the report's complex language, that is all there is, and the commissioners neglect to tell us that we have plenty of weapons already that can strike hard targets second — our bomber force may be the best system in the world for this legitimate purpose.

For almost 30 years, we have made survivable second-strike strength our central strategic standard. Are we now to move, in a cloud of consensus prose and good intentions, to a nonsurvivable first-strike system?

At the very least Congress should dig deeper than the commission or its sponsor. It might begin by seeking counsel from all quarters — there are many outstanding students in its own ranks. It should not rely on a report written by a panel carefully selected to include only tested friends of MX. It might well find that the Scowcroft commission has almost everything right except the recommendation that was preplanned by the White House. In spite of the commission's unexplained insistence that all its ideas make a single package, Congress has every right and duty to take only what it finds truly needed.

PRO-STEALTH STANCE

Senator KASTEN. This is all well and good. But, frankly, there are a number of us that have recognized a tendency in those who see arms control as an end in itself, rather than as a means to increased security, to approve of weapons that don't exist while opposing the ones that have been developed and are ready to be deployed. I think we are going through this now with the B–1. Many people who really want no bomber at all say they are for the Stealth, which has not been developed yet. They use the Stealth to kill an existing, deployable weapon, the B–1. Of course, what happens 5 years from now when we actually are going to make the decisions on Stealth is another question.

I am concerned that the same thing may be at work in the case of the small ICBM versus the MX. Those opposed to any modernization of our land-based ICBM force will now use the small ICBM to kill the MX that is ready to be deployed. My question is how serious is your support for the small ICBM? Specifically, if we had a small ICBM ready for deployment right now, would you actively support it?

Mr. BUNDY. Let me first say I understand your worry. There are people who knock down one system with the one that is further away. On my record, I would have to tell you I think I can plead innocent of that charge. I was in the National Security Office in the White House when we did build the largest single element, the main element, of the first triad, building on a base laid by President Eisenhower. I have always believed that we need to keep three legs. I have consistently supported reasonable and prudent efforts to do that. If there is such a thing as overdoing. I think perhaps you would agree there is a danger the other way, that one would support every proposal that comes from the Pentagon. I have never taken that position.

As to the Midgetman missile, it seems to me it does depend. It is a promising idea. It has been studied for years. We made a terrible mistake when we MIRV'ed without looking ahead to see if the Soviets would MIRV. So making single warhead missiles survivable in the 20th century environment needs study, and I think that is proposed. I think we have to await the results of that study before I can give an iron-clad, legitimate answer on that.

Senator KASTEN. So are you saying you voice some strong reservations or are you saying you would support it?

Mr. BUNDY. I said I would support it if proved affordable and survivable.

COST OF SMALL ICBM DEPLOYMENT

Senator KASTEN. Do you believe that survivability is a much more important consideration than cost in this case? In these matters of basing strategic forces, cost is a secondary consideration?

Mr. BUNDY. Cost is a secondary consideration.

Senator KASTEN. Given your reservations would you support a small ICBM deployment right now that would give us the same capability as the proposed MX deployment. Would you support a small ICBM deployment that would give us less than the capability

that 100 MX missiles would provide, or something more or something about the same?

Mr. BUNDY. Senator, we are talking hypotheticals, and I think one should enter any particular modernization in the context of the overall status of the strategic forces and status of the threat to. So I think it would be irresponsible to give you a precise answer to that.

WINDOW OF VULNERABILITY

Senator KASTEN. Mr. Turner, would you support a small ICBM if it was ready for deployment right now?

Admiral TURNER. Senator, the answer to that question, in my view, depends on your concept of the window of vulnerability, and the only place we are vulnerable is to surprise attack to the big missiles. If you really believe it is a great window of vulnerability today——

Senator KASTEN. Do you believe there is a window and we ought to go ahead with the MX if a small ICBM were ready for deployment?

Admiral TURNER. I don't believe there is a window of vulnerability today.

Senator KASTEN. So you would not want to go forward with a small ICBM even if one were available right now?

Admiral TURNER. Personally, no, I don't believe there is a window of vulnerability.

The second reason for going ahead with a small missile is you think there will be a window of vulnerability by the time you can have that missile sometime out in the future, and that is a judgment. And I don't happen to agree with that either. Therefore, I don't think we need the Midgetman even in the future, but I support the Midgetman today because I think it is politically necessary in our country, military politics and domestic politics and international politics, and therefore I think it is a reasonable way for us to be planning to go.

HARD KILL CAPABILITY

Senator KASTEN. Mr. Bundy, I am sure you are aware that many analysts disagree with your claim that the United States already possess a hard kill capability. It is my understanding in the previous question you talked about hard kill capability. But a number of people maintain neither the Trident, the D–5, nor the Minuteman III Mark 12–A can destroy hard targets, and the cruise missile is going to take too long to reach the target. Do you believe a hard kill capability is necessary?

Mr. BUNDY. I do. And I am going in my estimates of hard target kill capability on the reports of Secretary Weinberger.

Senator KASTEN. You are agreeing, in other words, with one group of analysts. There are, as I said, analysts who disagree with that claim. But you do believe we have a hard kill capability?

Mr. BUNDY. I do indeed, and so does the Secretary of Defense.

Senator KASTEN. If it could be proven to you that none of our present systems are capable of destroying hard targets, would you still oppose the MX?

Mr. BUNDY. If it were clearly demonstrated we had no other hard target capability, in spite of what the Secretary of Defense and the Joint Chiefs have repeatedly asserted we do, I would be astonished and reconsider my position.

Admiral TURNER. You both are working from the premise it is quick hard target that there is no hard target capability.

Senator KASTEN. It is going to take too long to reach the target.

Admiral TURNER. That I don't understand. Why do you have to do it quickly, what circumstances?

Senator KASTEN. There are some that feel that the timing is as important as the capability.

Admiral TURNER. That is what I seriously question. That is a strict military reflex, because you always want to counterattack as quickly as you can before the enemy forces gain more territory, but not in nuclear war. It is an entirely different situation. When you respond to an attack, if that is what you are talking about here, a quick response is an undersirable one. Why? Because if you give him only 30 minutes, the only decision he is likely to make is to counterlaunch, launch from under attack, which just brings back more destruction on the United States. If we attack, our objective should be to bring the termination of this nuclear war on terms acceptable to us. I therefore believe that the right response, the right retaliation, is a controlled, slow attack on the Soviet Union such that he has time to understand the decision he is making, to absorb that, which is not an unreasonable request, since we have absorbed his already, or so launch from under attack and so escalate to all-out holocaust. I would rather the Soviet leadership have hours to make that excruciating decision than 20 or 30 minutes.

STRATEGIC MUTUALLY ASSURED DESTRUCTION

Senator KASTEN. My next question concerns so-called strategy of mutually assured destruction. It seems you are getting into that when you start to talk about hours or long times to think about, to digest.

Without a counterforce weapon such as the MX, it seems the United States is forced to rely on mutual assured destruction, the MAD strategy, which in effect holds civilian populations of both countries hostage to nuclear holocaust. Do you approve of this concept of mutual assured destruction? Is it morally acceptable?

Admiral TURNER. That is not a relevant point.

Senator KASTEN. It isn't? Are you not in effect, advocating MAD when you stress long periods of time for decisionmaking?

Admiral TURNER. When you wait for hours, you can be attacking their military targets, the hardened military targets, and their cities. You are not forced by a doctrine of mutual assured destruction into attacking only cities, you are just forced to do it in a deliberate, slow manner, not to eschew hitting hard targets or strictly military targets. You make your own combination.

CIVIL DEFENSE PROGRAM OF SOVIET UNION

Senator KASTEN. Is that kind of strategy practical with the Soviet Union having developed a civil defense program that would

protect at least large portions of its population, particularly compared to ours?

Admiral TURNER. Senator, I studied the civil defense program of the Soviet Union thoroughly when I last had access to it. There is not more than 10 percent of the urban population of the Soviet Union that could possibly be protected by civil defense without 4 to 7 days' evacuation of their cities. So I don't hold the Soviet civil defense effort as being terribly significant.

Senator KASTEN. Thank you.

Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Senator.

Senator Leahy.

Senator LEAHY. Thank you, Mr. Chairman.

I agree the Soviet civil defense plan is not terribly significant, unlike our very effective civil defense plan--where, for example, New York City is evacuated on the basis of whether your license plate ends in an odd number or an even number. When they testified about that before this committee, Mr. Chairman, it made me imagine somebody sitting down and watching the evening news, and hearing an announcement that New York was about to face a nuclear attack. The TV announcer would say, "Please stay tuned after the commercials for a public service announcement on how to evacuate," and then being told if his car license ends with an even number he should leave on an even numbered day, and if in an odd number, on an odd number day. I picture John Q. Citizen sitting there and saying, "Dear, would you go down and look at our license plate so we know whether to leave today or tomorrow, and whether I can watch the end of the game?"

I suggested then that whoever came up with that little gem, which is incidentally a part of a $4 billion package, may want to go to New York sometime and try to get a cab to LaGuardia in the middle of a rainy day.

Mr. Chairman, I applaud you for the witnesses you have invited for 3 days of hearings, who will give us a well-balanced presentation. I am particularly concerned about two aspects of this issue. One is the need for consensus on strategic modernization and the other is the directly related question of how this reflects on the prospect for arms control.

Unlike the approach followed in the Eisenhower, Kennedy, Johnson, Nixon, Ford, and Carter administrations, where there was an effort made to get a bipartisan consensus on the Hill on defense policy, including strategic modernization, and arms control policy, this administration has made no attempt at achieving any kind of a bipartisan consensus. In fact, the administration has, for the most part, rejected efforts by both Republican and Democratic Senators to bring about a bipartisan policy on the major issues.

NEED FOR STRATEGIC MODERNIZATION

So, let me ask the witnesses a couple of questions about that absence of consensus. As a result of the Scowcroft Commission, we may be reaching the point where a bipartisan consensus on the need for strategic modernization has become a possibility. Might

that possibility be jeopardized if we rejected the Commission's MX recommendation?

Admiral TURNER. Mr. Bundy is the politician. I am a civil servant.

Mr. BUNDY. I was never accused of that before.

Senator, I think we can get a bipartisan consensus either way. I think that this is a relatively small part of the overall problem, unless there are plans to expand from 100 to 200 or to 300. It appears to me it is not needed and it doesn't make anywhere near the contribution it will cost. I don't believe in expressing that view I am departing from my own long conviction that it is well not to have the party line, the divisive line, in necessary, important questions. I think we can build bipartisan support for strategic modernization and serious arms control with or without MX. I don't think it adds. I would do it without it.

Senator LEAHY. Admiral.

Admiral TURNER. I doubt a bipartisan agreement on this one aspect is going to lead to a long-term bipartisan foreign policy or arms policy, sir.

Senator LEAHY. I feel very strongly that on arms control in particular, we are going to have to have bipartisan consensus, if for no other reason than simple numbers of votes needed for ratification. Any arms control treaty must be supported by two-thirds of the Senate, and only one-third can reject it. This will be true no matter who the President might be, including President Reagan. You have to have that broad a bipartisan agreement on the basic arms control approach.

Do you not agree that whatever the President recommends on arms control is going to have a direct relationship to what we do on this MX question? Obviously, there will have to be a different type of proposal in START, perhaps even in INF, if we reject MX than if we decide to fund it. If we decided to go ahead and fund the MX program without settling the question of production for a couple of years, what type of proposals do you think the President would have to make to justify that—or are there any? And, to look at the other side of that, what limitations do we place on the President's ability to reach any kind of arms control agreement if we delete the money for MX?

MX RELATION TO ARMS CONTROL

Mr. BUNDY. My own view is that MX has only a limited relation to arms control. It has relation to the particular question what it represents, namely, the construction of a new MIRV'ed ICBM, and I would be delighted to see and think there is a fighting chance that we could get, if the President went after it, an agreement on that particular point that there would be no new MIRV'ed ICBM's on either side. We are both in a relatively similar position on that narrow point. We have one ready for production and testing. They have one ready for production and in testing. I would love to see those two come off the board. But I don't think the MX in Minuteman can do any of the larger things that are suggested by some commentators. One happens to be former Secretary of State Kissinger, who has proposed we talk MX against the entire Soviet SS–18

force. I think that is simply not possible. It won't work. It doesn't make sense to propose because it will never happen.

The same is true in the broader situation of the Scrowcroft proposal, that deploying the MX in Minuteman will somehow encourage the Soviet Union to move away from the forces it has spent 10 years and tens of billions of rubles building. I don't think it works that way.

Senator LEAHY. Admiral, how do you feel?

Admiral TURNER. Senator, I think the Scowcroft Commission Report in itself points to the need for a President to change our negotiating position in START, because the Scowcroft Commission recommends we go to counting warheads rather than launchers and missiles, and the President's proposal is one of major reductions in launchers and missiles. So I don't think the MX in itself makes a major difference in the negotiating position, but I think a change in our negotiating position is signaled by the Scowcroft Commission.

Senator LEAHY. Would it make sense to combine START and INF?

Admiral TURNER. Yes. Before you came in, I strongly advocated that because the Pershing is the strongest bargaining chip we have. We shouldn't give it away for INF purposes but should retain it for START.

Senator LEAHY. I apologize for being late. In fact, I am going to have to leave here in just a few minutes. One of the problems of serving on several committees is that it makes it difficult to do all your work sometimes?

PERHING AS BARGAINING CHIP

I wonder if you just might explore that just a bit further, Admiral. You are saying you think Pershing is a more vital bargaining chip than MX?

Admiral TURNER. By far. No. 1 is it is imminent. No. 2 is it poses a unique threat to the Soviet Union of very rapid destruction of at least their command and control system, and therefore they have expressed I believe considerable concern about this. I think we have real leverage here. We are going to trade it away for a reduction in SS–20's, which we have discussed is not a very meaningful thing because the Europeans are under other threats beside the SS–20's. So why give away the best bargaining chip we have to mollify European sensitivities?

Senator LEAHY. If you were the director of the Soviet equivalent of the CIA, when you looked at the MX, would you look at that as being a first-strike weapon?

Admiral TURNER. Absolutely.

Senator LEAHY. Mr. Bundy.

Mr. BUNDY. It depends how many of it. It is not an immediate first-strike weapon in the sense it would threaten the whole force, but it is certainly a beginning in that direction.

Senator LEAHY. Do you agree with some of the comments made earlier that if we start deployment of 100 we are not going to stop there?

Mr. BUNDY. It is a lot harder. It becomes relatively easy to come in and say you paid for everything but a marginal missile, and it will only cost a little bit to have an extra 100, and you do get those forces that press for additional deployment. I think this missile becomes very dangerous at levels much above 100. Up to that level, it seems to me more accurately described as a waste.

Senator LEAHY. Do you think the pressure would be to discontinue the Minuteman, even though apparently it would be effective into the next century with the planned upgradings?

Mr. BUNDY. I think the Minuteman force has a lot of good and useful life ahead of it and does the job until such time we find a genuinely survivable ICBM deployment and missile, which I think we should be looking for.

Senator LEAHY. Which is not what we see in MX as planned in the Commission report?

Mr. BUNDY. Absolutely not.

Senator LEAHY. Admiral, you concur with that?

Admiral TURNER. Yes.

Senator LEAHY. Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Senator.

Senator Rudman.

MUTUALLY BALANCED FORCES

Senator RUDMAN. I really only have two or three more questions I want to follow up on. The last question I asked regarding your collective position, that if forces do not have to be mutually balanced, that the Soviets essentially put their emphasis on the land-based leg of their triad, and you were saying we don't necessarily have to do the same, in fact, Admiral Turner, I think you said it even more passionately than Mr. Bundy did. That being the case, and coming back to our other parts of the triad, talking about the air-launched cruise missiles, which you both seem to think are a far more effective deterrent than MX, if I understand your testimony, if your information was that the B–1 would give a dimension to those ALCM's that the B–52 does not give, and that there was some serious life-cycle problems with the 52's, would you then seriously reconsider your position on B–1?

Mr. BUNDY. I can imagine kinds of information that would make me feel that the B–1 is more urgent than I now do. And I should add my feeling about it is not as it is about MX, that this is a weapon that goes in the wrong direction, only that in the overall process of looking at what is needed for defense, while I think the airborne leg is crucial, I am not just sure this particular reinforcement is needed now.

SURVIVABILITY OF TRIAD

Senator RUDMAN. Well, do either of you feel that it is necessary that all components of the triad be absolutely survivable in order to enhance the overall deterrent of all three?

Mr. BUNDY. That is really what the Scowcroft Commission helped us on by pointing out that overall survivability is the right test.

Admiral TURNER. But the concept of the triad was to back up one element if one becomes vulnerable. There is no point in building a vulnerable element to back up a vulnerable element.

Senator RUDMAN. The best example of the synergism between the two is a SAC base and missile base next door in the heartland of America, where if the Soviets decided to launch an ICBM with first strike, there isn't time to launch the missiles. On the other hand, if they tried to hit SAC bases along the coast, then there is adequate time to launch the missiles. We can all agree there is no need for absolute invulnerability in all triads, and you have said that.

Mr. BUNDY. There is a problem in the long run there, and that is worth bearing in mind, and that is, over time, there may come to be a Soviet seaborne force able to make simultaneous attack. The reason I raise it is not because it is a danger today or tomorrow, but the desperate trouble with this problem of strategic stability it has to be considered in terms of what may happen to you 5 or 10 years from now. We learned that the hard way with MIRV. We are getting to the point where we have to think about the long-deployment possibilities of both sides in wider and deeper terms than we are now.

SEA-BASED LEG OF TRIAD

Senator RUDMAN. That really leads into the next question conveniently, and I think I will address this to Admiral Turner, and that is we put a great deal of faith in our sea-based leg, as we well should, but now with what is happening with technology I think we have to look out into the 1990's in terms of how invulnerable our sea-based force will be. There are those, without getting into classified information, that say the technical means will be available by us, and possibly the Soviets, to detect and precisely locate the sea-based force from satellite. If that in fact happens, we have a real problem in terms of deterrence, haven't we?

Admiral TURNER. Yes. I have never advocated putting more of our strategic deterrence into ballistic missile submarines. I do advocate we put more cruise missiles in attack submarines. It gives more platforms and makes it more difficult. We should also put in perspective the thoughts that submarines are going to become vulnerable, because it is very unlikely they will become suddenly totally visible and vulnerable. And that means, in my view, they will always be less vulnerable than Minuteman or MX, which are certainly visible and targetable and destructible. So the only issue in the future, in my view, is whether the submarine element becomes so expensive that we don't want to afford it. But it will be a less vulnerable element than at least the land-based, fixed ICBM missile. So I think the submarines will still have considerable usefulness well into the future, and with movement and other things you can try to conceal, hide, confuse, deceive, and so on, where there is not a thing you can do to the silo.

ARMS ESCALATION UNDER KENNEDY ADMINISTRATION

Senator RUDMAN. My last question, and let me assure you it is not meant to be a tart or pointed question. It is asked for a specific

reason because we are talking about arms, but also about force projects, international political power. When you read the Commission's report, you have to come to the conclusion that the much heralded window of vulnerability, which was a major campaign issue in 1980, was maybe more perceived than real. You were part of an administration which came to power about 22 years ago, and I remember that campaign as much as anything on a proclamation that we had a missile gap at that time. Then after the administration came into power there was a grand debate here in the Congress. It was found maybe we didn't, but, nevertheless, the Kennedy administration did involve itself in substantial arms escalation, call it modernization. Doesn't the Scowcroft report tell the President at this time to do the same thing?

Mr. BUNDY. Let me plead nolo on the missile gap and go on.

Senator RUDMAN. Please.

Mr. BUNDY. The buildup that we executed in the early 1960's was a product of a very intense debate back and forth and was a very substantial one, would have been bigger, of course, if the uniformed military and indeed the Congress in those days had their own way. It was smaller then. Public opinion and professional opinion were then advocates. It may have been too big. As to whether it contributed to or stimulated the massive Soviet buildup in the latter half of the 1960's, that is a hard historic question. I am not sure I know the answer.

As for the current situation, we have to look very hard at where we are, where they are, and where we are overall. And what I think is so important is not to get into measuring one leg of a vary strong three-legged system against another leg which is the dominant one of a very different and more unbalanced systems. That is the mistake that seems to me has been made, certainly in public presentations, by the administration, which regularly compares the charts of Soviet missiles against the charts of American land-based missiles. That is comparing one-third of our force against three-quarters of theirs, and it is not the right way to think about it. So I think this committee and the Senate and the Congress as a whole has the responsibility to do what you are doing in your questions this morning, asking about particular systems, what their need and value is, and whether overall those systems meet the requirements of strategic deterrance. I think they do, and do it amply without MX in Minuteman.

Senator RUDMAN. Thank you very much, Mr. Bundy and Mr. Turner.

Mr. Chairman, I want to take an opportunity to thank you for arranging this series of hearings to bring balance and fairness in the testimony before the committee, and certainly to the two witnesses this morning.

Take pity, gentlemen, for the members of the committee. Look at the lineup we will have over the next 3 or 4 days giving us totally conflicting and opposite testimony, coming from people of acknowledged intellect and experience. And I sometimes wonder around here if we might not solve a problem with the use of a coin. Obviously with $16 billion you can't use a coin. I think it will be a period of critical self-examination and agonizing on this particular issue. I think for one thing the military modernization and $16 bil-

lion is a great deal of money and it is important we put it in the right place. Maybe this is the right place, but I am still on the fence with this one.

Chairman HATFIELD. Senator, I wish to respond to you and other members of the committee who have made expressions of comment on the calling of these hearings. I would only say when I raised the proposition that we should give careful consideration during the financial budget hearings on this question, and possibly over a fence on this situation the Congress could receive the report of the Commission and make some judgment on the basing mode recommendation, it was, of course, with the full support of the committee. So the committee itself I think should be commended for taking this action. I merely perhaps was the lead person on it, but I felt it was important for the role of the committee and for their accountability in this committee before we went ahead and appropriated that amount of money that was requested for fiscal year 1983.

Senator Huddleston.

VALUE OF DEPLOYING MX MISSILES

Senator HUDDLESTON. Thank you very much, Mr. Chairman.

I regret that I haven't been here from the beginning. I am sure I will be going over ground that has already been covered, so I will keep my questions to about three or four basic subjects. I particularly regret that I didn't hear the full testimony of two witnesses for whom I have a great deal of respect; I value their opinions very much.

My first question is: What is the real overall strategic value of deploying 100 MX missiles in Minuteman silos? What does it actually do if you set aside the political implications, the question of what influence it might have on arms limitation negotiation, what does it do militarily in the overall nuclear context? Maybe Admiral Turner can give me an opinion on this. What does it do as far as actually improving our ability to defend the United States?

Admiral TURNER. It does two things, sir. It gives you the option of a surprise first attack on the Soviet Union. Second, it gives you the option of responding very rapidly against the hard targets in the Soviet Union had you been attacked first.

Senator HUDDLESTON. Responding more effectively than we could with the Minuteman?

Admiral TURNER. Less effectively than the Minuteman. Yes, more effectively than the Minuteman, but I don't happen to think responding rapidly in the event of our being attacked has anything to do with responding equally effectively with destruction, but slowly.

REJECTION OF FIRST STRIKE

Senator HUDDLESTON. Now your first option, a first strike, is one that we reject anyhow. We are not going to launch a surprise attack on the Soviet Union.

Admiral TURNER. Yes, sir.

Senator HUDDLESTON. So what we come to is a comparison of the value of the 100 MX versus an upgrade of the Minuteman which is

already there; would we still have a strategic advantage with the MX?

Admiral TURNER. Yes, because of the throw weight of the MX compared to the Minuteman. I am not advocating this, I want to make clear. I am answering your questions as directly as I can from a military fighting view. You get a lot more warheads with this than you can ever retrofit on the Minuteman.

Senator HUDDLESTON. Is it worth $16 billion?

Admiral TURNER. No, sir, I don't believe so. It is not only not worth $16 billion, I think it is inimical to the long-term interests of the country.

Senator HUDDLESTON. Militarily, would a combination of upgrading Minuteman plus deploying a Midgetman in some fashion, give us an advantage vis-a-vis our present situation?

Admiral TURNER. It would improve our situation to the degree that the Midgetman is much less vulnerable and therefore less likely to leave us in a position where the Soviets would ever strike first on the hope they could somehow disable us. I think that is the advantage of going to that kind of an MX-Minuteman combination.

DEPLOYMENT OF MIDGETMEN

Senator HUDDLESTON. Have you given any thought to the situation that might prevail if we did in fact deploy a number of Midgetmen at scattered locations, requiring a targeting by the Soviet Union of a number of different locations. What would that do to the country if the attack actually came? Instead of maybe wiping out Omaha and Cheyenne, would they be wiping out two-thirds of the United States in trying to get that system?

Admiral TURNER. That is an obvious disadvantage. Let me point out the reverse side of that, sir.

To begin with, the whole theory that the Soviets might initiate some limited nuclear attack on the United States is one I reject as being very implausible, but we do have to grapple with it as a remote possibility.

Senator HUDDLESTON. I agree with you, incidentally.

Admiral TURNER. I think in some ways it is better to force the Soviets to realize if they start a limited attack on the United States, it cannot be very limited. I think it raises the threshold of willingness to start down this course. If they really thought they could surgically take out most of our nuclear force with little destruction of cities and people, they might be more tempted to do that rather improbable scenario. So I don't think that is a totally bad situation that would develop in this case.

Senator HUDDLESTON. Worth thinking about.

BARGAINING VALUE OF MX

Let me turn Mr. Bundy, who is experienced in negotiating and developing negotiating positions. If in fact the deployment of the MX, 100 of them, either with or without a Midgetman, provides us with so little increased strategic value, why is it reasonable to think that it is some kind of a bargaining chip that is going to force or scare the Soviet Union to the bargaining table?

Mr. BUNDY. I think that is the right question. I don't think it will do that on any large scale, and I think when you hear suggestions that it would somehow help change the whole Soviet attitude toward their own ICBM, MIRVed ICBM, force, which is the greatest prize in their arsenal, you are merely wishful thinking. I think it may be useful to try to trade out the MX in Minuteman against the specific system the Soviets are developing that is like it, and perhaps to get an agreement that there would be no new MIRV'ed ICBM's, which would be a good step forward. That is the most I think it will do at the bargaining table.

Senator HUDDLESTON. It doesn't seem to be any great advancement that is going to make the Soviets want to throw up their hands and say we can't cope with it, we can't match it, so we better talk about reducing.

Mr. BUNDY. The only way it could have that kind of importance is if we built very much more, and I think that would be very dangerous and very unstable, and it would be a quick trigger situation, and it would make two in the world and one is enough.

Senator HUDDLESTON. Thank you.

Chairman HATFIELD. Thank you, Senator.

Senator McClure.

Senator MCCLURE. Mr. Bundy, I am always intrigued by the statement if they do something it is not destabilizing but if we do it, it is destabilizing.

Mr. BUNDY. I think it happens to be true in this case. That is the only reason I said that.

DETERRENCE AS STRATEGY

Senator MCCLURE. First of all, let me get on the record whether or not you believe deterrence is a useful strategy.

Mr. BUNDY. It is essential.

Senator MCCLURE. It is essential. Then deterrence has to be as they view it, not as we view it.

Mr. BUNDY. That is correct. It is their will that is deterred.

Senator MCCLURE. And it must be their view of our capability, not our view of our capability, that becomes important.

Mr. BUNDY. That is correct.

Senator MCCLURE. If they view it necessary or useful to build up their forces, is it not likely that they would also view our forces in the same context?

Mr. BUNDY. I think they look at our forces through the eyes of an adversary, and look at theirs with great respect.

Senator MCCLURE. They look at theirs with great respect, but obviously they are building up their own beyond the point we have built up.

Mr. BUNDY. They have built up their ICBM beyond the point of our ICBM. Their overall system I wouldn't trade for ours.

Senator MCCLURE. I understand that, and that is a fair comment and I don't mean to set it aside. But they have built up with a view for hardness and vulnerability and numbers, with a view toward building more that are less vulnerable, and they continue to do so. They have not showed any signs of stopping.

Mr. BUNDY. No; I think not.

Senator McCLURE. Why do you conclude they would conclude our stopping as somehow a favorable result in terms of our capability?

Mr. BUNDY. I didn't think I said that.

Senator McCLURE. I thought you said it didn't add anything to our capability.

Mr. BUNDY. I don't think it does.

Senator McCLURE. You don't think they think it does?

Mr. BUNDY. I think they would regard the deployment of MX in Minuteman as something that is answered by further deployment of theirs.

Senator McCLURE. They are further deploying?

Mr. BUNDY. We haven't tried to see if we can get a no-new-MIRV agreement.

Senator McCLURE. We haven't tried?

Mr. BUNDY. No; not that particular element.

Admiral TURNER. Could I make a comment. I don't think the Soviets are fielding more missiles, they are planning to replace their missiles but they are holding to the SALT II agreements, not to the SALT I agreements.

Mr. BUNDY. They are modernizing within the same silo limits so far.

SALT I/SALT II AGREEMENTS

Senator McCLURE. The Soviets already have deployed 820 MX equivalent ICBM's. Last year the Soviets deployed more MX-sized warheads than the United States plans by 1989. That was just last year, over 1,000.

Admiral TURNER. In existing silos.

Senator McCLURE. Well, that is part of the SALT I/SALT II agreements, that we focused on missile launching systems not numbers of warheads, is it not?

Admiral TURNER. Well, SALT II does take care of warheads.

Senator McCLURE. To a limited degree. What you are saying, since they have lived within SALT I or SALT II, or have not by their terms violated, therefore, our response within the same limits is destabilizing, if I understood Mr. Bundy correct.

Mr. BUNDY. No, sir. I do believe when you have—I recognize the force of your point that the Soviet mind is not the American mind, and that is something we should come back to. I am making the quite narrow, technical distinction two systems in the hands of nations A and B like the Soviet system would be much more dangerous than two sets of systems like our own.

Senator McCLURE. And I understand that point, whether I agree or not. I understand you have made that point a number of times and I understand where you are coming from, but I still don't quite get through my head how you believe if deterrence is useful as a strategy that having less capacity in this system than they have in their system, that they view deterrence more surely in the hand of the United States without increasing our capacity than they would if we increased our capacity.

Mr. BUNDY. Well, I think we should increase our capacity where we need to make them feel fully deterred. I think myself they regard the bombers, the cruise missiles, the submarines with just

as much respect with MX in Minuteman, and I think those systems are much better for our purposes.

ENCRYPTION OF SIGNALS BY SOVIETS ON ICBM'S

Senator McCLURE. Admiral Turner, do you believe that the Soviet encryption of the signals on their new ICBM's is a violation of article XV of SALT II?

Admiral TURNER. Senator, I don't have access to classified information as to what they have done. If they have encrypted 100 percent, as some of the newspaper stories say, yes, that is a violation. I don't know whether they have or not.

Senator McCLURE. Do you doubt it?

Admiral TURNER. Yes.

Senator McCLURE. You doubt whether they have encrypted the telemetry?

Admiral TURNER. Yes; I don't have any basis for believing the press.

Senator McCLURE. Do you have any basis for disbelieving those reports?

Admiral TURNER. I have been so intimately involved with this issue of encryption that I have real reason to believe that the press understands it. Yes, I do. It is a very complex issue.

Mr. BUNDY. No reasons to doubt.

Senator McCLURE. Excuse me?

Admiral TURNER. I doubt that the press understands encryption of the telemetry.

Senator McCLURE. But if indeed it is encrypted, it is a violation?

Admiral TURNER. A hundred percent; yes.

Senator McCLURE. Are you setting up an absolute or just a measure?

Admiral TURNER. I am setting up an absolute.

Senator McCLURE. In other words, encryption up to less than the absolute is not a violation of SALT II?

Admiral TURNER. No; it may be. The terms of the agreement were that they would leave us enough to verify, and in determining whether that is 2 percent——

Senator McCLURE. Wasn't the term used in SALT II we shall not interfere with national means of verification?

Admiral TURNER. That is correct. But in the degree of the telemetry——

Senator McCLURE. National technical means. I should have used that word.

Admiral TURNER. That is correct.

But in the degree of telemetry—I am bordering on classified material, I am trying to be very careful here—the Soviets have an argument, and I don't sympathize with this and I fought it in the SALT II negotiations——

Mr. BUNDY. I will vouch for that.

Admiral TURNER [continuing]. That we have demanded more telemetry access than is necessary just for verification, that we were getting other information not covered by the terms of the treaty. Sir, determining where that line is is terribly fuzzy. That is why I fought the way we negotiated it, and that is why I am hesitant to

agree on the basis of a newspaper report they have in fact violated the agreement.

Senator McCLURE. I understand that point, but I was afraid I had misunderstood you earlier when you said when it was 100-percent encryption, it was a violation.

Admiral TURNER. I think you have caught me in a logical inconsistency, and you have caught me in that I think. I am trying to doublecheck myself here.

What I think the point is, if there is 100 percent encryption, it is surely a violation. You are correct it could be a violation at less than 100 percent.

Senator McCLURE. I understand.

VERIFIABILITY

Admiral Turner, you testified in 1979 this provision of SALT II, the ban against the missiles, was adequately verifiable. Do you believe that it is verifiable today?

Admiral TURNER. Again, I think so, if we have the telemetry we had in 1979.

Senator McCLURE. I am talking now about SALT II, article IV, paragraph 9, which defines a new type of ICBM.

Admiral TURNER. Yes.

Senator McCLURE. Do you think the tests that are underway in Russia today are simply the upgrading of the old SS–13?

Admiral TURNER. Sir, I just don't have access to information to possibly pass judgment. That is a very complex issue. That is a question of the percentage of change of throw weight, for instance.

DIFFERENCES IN SOVIET MISSILE THROW WEIGHT

Senator McCLURE. What is the difference of throw weight of the SS–13 and their more modern missiles?

Admiral TURNER. This one that they have?

Senator McCLURE. No; the more modern missiles of other classes?

Admiral TURNER. I don't know.

Senator McCLURE. This 13 is a very small missile compared to the others they have developed and deployed recently, is it not?

Admiral TURNER. Yes.

Senator McCLURE. Is it logically consistent to believe they are testing one now that is only 5 percent larger, less than 5 percent larger than the other one that is very much smaller than all the rest of their new ones?

Admiral TURNER. Yes; I think it is quite possible they want a upgrade of the SS–13 for other reasons.

Senator McCLURE. They don't waste their money like we do.

Admiral TURNER. But, sir; we knew from the beginning they were developing a single-warhead missile which doesn't require that kind of a throw weight, and our question back in 1979 and 1980 was were they going to use a single-warhead missile or a MIRV missile as their one permissible missile? For some reason way back then they felt they could use in an arsenal a smaller single-warhead weapon.

SOVIET HARD TARGETS

Senator McCLURE. Admiral, what is the significance for the number of MX ICBM's we should deploy of the fact the Soviets have over twice as many hard targets as the United States, which on the average are three times as hard as U.S. hard targets? Doesn't the Soviet hard target structure make only 100 MX ICBM's completely incapable of credible U.S. first strike?

Admiral TURNER. I believe 100 MX added to the Minuteman force gives you a marginal first-strike capability against the Soviet Union.

Senator McCLURE. Is it useful for us to have a first-strike capability or is it worth it for us to have that capability?

Admiral TURNER. I think it is not useful for us, and in fact is inimical to our interests.

Senator McCLURE. So we should be content to allow them to have first-strike capability while we do not have?

Admiral TURNER. We should try to encourage them to eschew a first-strike capability, but our developing one is not the way to do that. And to answer your basic question, sir, yes, there is an asymmetry here in it being destabilizing for us to complete the cycle and have both sides with first-strike capability, whereas the Soviets' having started first on this route, we consider it bad, not destabilizing for them to have developed it. I think that is a cross that the United States of America bears, and we have suffered this in many other categories, largely propaganda. It is a cross we bear for being a more responsible nation than the Soviet Union, and unless our national security is dependent on matching their first-strike capability, I think our being a more responsible nation calls upon us not to move into what is a destabilizing position where both of us have that.

Senator McCLURE. I understand your viewpoint, although I don't agree with it. And I have never yet seen a situation in which the Soviet Union responded, just because we were good guys, responded favorably. In essence, I assume what you are trying to say is we should try and restrain ourselves and then hope to negotiate restraint on their part.

Admiral TURNER. No, not at all, sir. We should restrain ourselves for things we do not need for our national security and which are destabilizing, and we have lots of methods of negotiating with them to get them to move in the direction I suggested.

Senator McCLURE. Perhaps I don't understand what you mean by the term destabilizing.

Admiral TURNER. I mean that it increases the risk that one of us will go to war by miscalculation.

Senator McCLURE. Do you think there is a danger the United States will go to war by miscalculation?

Admiral TURNER. Yes. I think if the President of the United States were erroneously told that a major attack were imminent on this nation, in progress that is, and he had that first-strike capability, he could possibly launch it totally erroneously.

Senator McCLURE. That is a really substantial theory the United States would go to war by mistake?

Admiral TURNER. Yes.

Senator McCLURE. Then I understand where you are coming from.

Chairman HATFIELD. Thank you, Senator.

I have not used my 10 minutes, but I would only refer the Senator to the false alerts we have had from our advanced warning system within a very restricted period of time that has put us on some partial alert and we have had the opportunity to verify the falsity of those. So I think there is a very clear and present danger always confronting us of having erroneous information, that we are relying upon technology to provide us and make decisions based upon that, but fortunately that we had the sufficiency of time to verify the erroneous information.

Senator McCLURE. Would the Senator yield on that?

REDUCED VERIFICATION WITH MX

Certainly that is a possibility: we might, through error, but does increasing our capability increase the likelihood of error?

Chairman HATFIELD. Yes, because it reduces the one-half hour we have now for verification down to 6 minutes with the MX missile.

Senator McCLURE. That is a different question.

Chairman HATFIELD. No, the question is increasing the capability, does that decrease the possibility of error, and I am saying that if you reduce your ability to confirm a signal from one-half hour to 6 minutes, you have lowered the threshold of potential war from launch on warning or launch after attack to first strike.

Senator McCLURE. If that is an argument, it is an argument for more capacity on our side rather than less, because you have to allow him to wipe out a large percentage of ours before you respond.

Chairman HATFIELD. I would like to say Admiral Turner's remarks about the press and the accuracy of those reports call forth the memory of this article in the New Republic this week in which they quote a Karl Kraus, who was a Viennese writer. He asked a question how is the world ruled and how do wars start? And then he stated, "Diplomats tell lies to journalists, and then they believe what they read." There may be some modern application.

Senator Stevens.

THRUST OF MX RESOLUTION

Senator STEVENS. Thank you, Mr. Chairman.

Gentlemen, having been involved very personally in the continuing resolution that led us to where we are, I am reminded that what we are dealing with is a resolution to release the funds for expenditure for MX research and development upon approval of the basing mode. It is my understanding that the two of you are approaching this on the basis we have not approved the missile. And you are both distinguished men. I know your past service. I am not in any way trying to impune that. Did you seriously tell President Carter not to deploy the MX?

Mr. BUNDY. Sir, I spoke to this while you were out of the room, but let me speak to it again because you have raised a very important point. It will take me a minute to explain.

I recognize why the resolution was framed the way it is, but I don't think you can talk about any major weapons system out of the context of its basing mode. I think that is the mistake we have made with the MX from the beginning.

Senator STEVENS. If we had approved Carter's MX basing mode, we wouldn't be here today?

Mr. BUNDY. That is correct, and I was for that.

Senator STEVENS. You were for that. So we are not arguing about the missile.

Mr. BUNDY. Yes, but I really don't accept the point you are trying to make. I am trying to explain why I don't.

Senator STEVENS. Go ahead.

Mr. BUNDY. I think MX in a survivable mode is a totally different system from MX in Minuteman.

Senator STEVENS. You don't accept at all the comparison between the position we are in now historically with MX and the position we were in historically with the ABM at the time the Senate voted 50 to 49 to continue the ABM? We did that so that the President might go to the conference to limit the ABM construction with a stronger bargaining position. That led to the provision we build the ABM, we build one if the Russians build five. They scaled it down at the time. We scaled ours down, and I understand theirs are now obsolete, they have not been modified, according to my information, since that agreement was made. They have, according to my information, abided by the ABM portion of that treaty. Would you argue with that?

Mr. BUNDY. There is some upgrading around Moscow, but they have abided by the treaty.

Senator STEVENS. We led the world to a greater stabilization by authorizing the ABM and going to the conference and agreeing with the Russians that they ought to be building only one ABM in exchange for us not building a whole new system.

Admiral TURNER. That I would like to say, that does not carry over to the MX.

Senator STEVENS. Why? The MX is to be deployed, just as the ABM was, and we are about ready to unfence the basing moneys for the MX just as the President is going to another conference.

Admiral TURNER. Senator, to begin with, we had much more leverage with regard to ABM than we do with regard to large land-based ICBM's. First of all, we had a lead over the Soviets in ABM technology, which worried them considerably. We were not building as rapidly, but they felt we might be much closer to achieving ABM capability than they.

COMPARISON OF MX TO SOVIET SYSTEM

Senator STEVENS. You don't believe that the MX will be a superior weapon to the Soviet land-based missiles now deployed?

Admiral TURNER. No, not significantly, because we are both top end capability. The marginal difference between these is very small.

Second, the ABM system did not affect the Soviets' critical security interests. That is, it was not a question of asking them to give up something on which they felt their national security was de-

pendent. If you ask them to really reduce their ICBM's today, because they are so much more dependent for the assured survivable retaliatory capability than we, you are asking them to cut into the heart of their system, not sacrifice like ABM.

BARGAINING STRENGTH OF MX

Senator STEVENS. Let's back off and put it this way: Is it not true that the position stated by the President, the negotiating position for START, presumes the deployment of the 100 MX? I think you would have to agree that is yes, that it was the stated position of the administration. We are going on the basis we have authority to deploy 100 MX. If the Congress refuses the President that authority, then we have already undercut his negotiating position, have we not?

Admiral TURNER. Yes, but not very much because the MX is not a very big bargaining chip.

Senator STEVENS. Well, we don't do the negotiating. It seems to me that you gentlemen are asking us to be part of the negotiation and say the negotiating position stated by the President—incidentally, as I understand, a continuum from the past administration—should be undercut by an action of Congress, when we are really talking about the basing mode not about the missile. We are here on the resolution that pertains to the basing mode. Is this a credible basing mode decision? I would urge you to address the issue that is before us. That is the issue.

Mr. BUNDY. May I try again?

Senator STEVENS. Yes.

Mr. BUNDY. The basing mode changes the whole impact of the missile on us, on them, on the balance. A survivable system gives us confidence that we can use it when we want to, not in some crisis under attack and not in a destabilizing way. A survivable system is vastly better and that changes the whole equation for me.

MX AS FIRST-STRIKE CAPABILITY

Senator STEVENS. Isn't that the beauty of the Scowcroft Commission recommendation? Doesn't it add a degree of uncertainty to the MX that makes it have a capability beyond what it would have had under the Carter administration?

Mr. BUNDY. I don't understand.

Senator STEVENS. Senator McClure just raised it. It raises the question of whether it could be used in a first-strike capability.

Mr. BUNDY. Not any more than it would be in the other deployment. It is the same weapon with the same flight time.

Senator STEVENS. No, because the other was a concept of deployment by means of a deception concept. They would never know where it was, all of that business that went into the racetrack concept at the silos, and the whole intention was we could keep building silos as they improve their ability to find out where they are. Now they are standing out there in front of God and anybody in silos we know. Everybody knows they are there, and everybody knows they are vulnerable in those silos. Under the Carter proposal some of the silos were false and they would have been empty.

Now everybody knows where they are. We end up out there in front of God and everybody. To me that ought to be a symbol to the Russians they ought to negotiate. If you don't see it the same way, I don't think you understand the difference between SALT and START.

Mr. BUNDY. I understand the difference between SALT and START. One is negotiable and the other is not.

Senator STEVENS. That is a matter of opinion.

Mr. BUNDY. Oh, sure. It is mine.

Senator STEVENS. I have lived through this and supported SALT I and seen what the Russians did under it. I saw them change their position from being greatly inferior of our position to a position of near superiority under an agreement we thought protected the United States. You are entitled to your opinion, but I don't think you are entitled to recommend to the Senate that we withdraw from the President his negotiating capability by a unilateral act of Congress in not giving approval to a basing mode when the MX was already approved before he became President.

Mr. BUNDY. Senator, on the point of what is negotiated, we had considerable discussion while you were inadvertently out of the room. I would just say again, I do not think, in our experience with negotiating with the Soviets, the MX in Minuteman is going to produce a desired change of the sort proposed in START in the Soviet strategy of deployment. I simply think we are kidding ourselves. If I may read you one sentence from a report put out yesterday by a very distinguished bypartisan panel, including General Scowcroft, that.

> American military programs, as they move forward, the Soviets may find it expedient to accept or propose significant compromises in arms control whereby they accept limitations on their land-based missiles in exchange for constraints on American cruise missiles and other weapons. For that to happen, however, American leaders will have to compromise away the unrealistic hope of forcing radical reductions in and restructuring of Soviet forces.

That is what START tries to do. It won't get there from here.

Senator STEVENS. Well, you know that is like someone told me the other day, they wanted to move the command for the Alaska Air Command to Hawaii. Do you know what my response to them was? "I remember at Pearl Harbor their track record wasn't so good."

The track record of the negotiator you are talking about hasn't been very good either, and it is time the country gave the President the opportunity to do what he said he was going to do, and that is try. He hasn't promised to achieve. He said he would try a new negotiating stance. And respectfully, I tell you I think we would be wrong to deny the President one of the basic legs of his negotiating stance in START. And that is the issue before us. It is not whether the MX missile should be authorized.

Chairman HATFIELD. Thank you, Senator. You have not been able to be here and we are on the second round if you would like to proceed with other questions.

Senator STEVENS. I think we have a difference in philosophy, not a difference in our total approach to the country's future. I know and respect these two gentlemen. There is no use debating with them. I want to debate with you all on the floor.

Chairman HATFIELD. Senator McClure, do you have further questions?

MODERNIZATION OF ICBM FORCE

Senator MCCLURE. Mr. Bundy, if the United States does not modernize our ICBM force, I understand that is your posture, you would not have us modernize the ICBM force so long as it is not in what you would call an invulnerable basing mode?

Mr. BUNDY. I would very much like to have an invulnerable or much more survivable basing mode, because one does think in relative rather than absolute terms, a much more survivable ICBM force than we have. I think it is important to explore the alternative methods. The best that I have heard of is to get the small single-warhead missile and to think about and study the various basing modes which that makes possible because it is very much lower weight. And I would hope to be able to support such a system and think it would be a valuable reinforcement as to the strategic deterrent if it proves out.

Senator MCCLURE. If it could be invulnerable?

Mr. BUNDY. If it could be significantly more survivable than Minuteman.

Senator MCCLURE. Would I understand you, Admiral Turner, in terms of your definition of what is destabilizing, to say we could deploy the MX missiles or any other missiles in a completely invulnerable manner that that would not be destabilizing?

Admiral TURNER. No, that still would be destabilizing in my view because it threatens the first strike.

Senator MCCLURE. Anything that threatens their first-strike capability is destabilizing?

Admiral TURNER. That is correct.

Senator MCCLURE. I guess then you are following the McNamara school of philosophy which says the reason for tensions is because we are ahead and they have to catch up, and they catch up and therefore the reasons for tension will be increased.

Admiral TURNER. No, sir.

Senator MCCLURE. I have some difficulty with that.

PROBLEMS WITH FAILURE TO MODERNIZE

Let me ask a further question, Mr. Bundy. If we fail to modernize, for whatever reason, doesn't this failure on our part give the Soviets a chance to focus their capability on antiballistic missiles in their air and antisubmarine warfare defenses?

Mr. BUNDY. I think efforts on all fronts in the modernization of strategic forces is desirable. I have made that extremely clear in the course of the morning. If not, let me underline it now. And I share your view it is important to complicate the task of Soviet planners. I think we are doing that amply in the forces that we now have under procurement and development, and I think that is still true without MX. If MX could be deployed in a survivable mode, I would be for it. I do not quite share Admiral Turner's view it would be destabilizing. I think because a survivable force even with a first-strike capability, there will be questions. There will be questions about Trident II, for example.

SOVIET VIOLATION OF ABM TREATY.

Senator McCLURE. Admiral Turner, Henry Kissinger has stated the Soviets violated the SALT I AMB Treaty by testing surface-to-air missiles in an ABM mode. Twenty-one Senators have suggested that Soviet ABM battle management radars may violate the ABM Treaty. Do you believe that the Soviets have violated the ABM Treaty?

Admiral TURNER. That is a very fine call here, sir, and I think technically they have. They claim that they did it by inadvertence twice; that is, they were exercising an ABM system at the same moment at which they were testing a ballistic missile, in the same general environment.

Senator McCLURE. And that was just coincidence?

Admiral TURNER. That is a violation and they claimed it was an inadvertence on their part. Whether these have reoccurred since I had access to classified information, I don't know.

SURVIVABILITY OF MX IN MINUTEMAN SILOS

Senator McCLURE. Would an ABM defense increase the survivability of the MX in Minuteman silos?

Admiral TURNER. Yes, it could.

Senator McCLURE. Should we deploy an ABM system or would that be destabilizing?

Admiral TURNER. I don't have concerns about the destabilizing nature of an ABM system at this point.

Senator McCLURE. Would you be concerned that that might be destabilizing?

Admiral TURNER. I think there are important reasons for keeping this in front of us, but breaking ABM and setting the Soviets free to do all the things that scare us, I agree with the administration this is no time to break the ABM on our side.

Senator McCLURE. We are entitled under the ABM Treaty to have a single ABM system.

Mr. BUNDY. Yes, and it is not clear to me we could get the limitations if we didn't have the ABM Treaty.

DENSE PACK ABM

Senator McCLURE. If we had dense pack or something like that, together with a single ABM system, that is authorized by the treaty.

Mr. BUNDY. I have never studied the dense pack-ABM question because I assume dense pack is off the boards now.

Senator McCLURE. Thank you.

Chairman HATFIELD. Thank you, Senator.

I have one last question.

SOVIET STRATEGIC WARNING CAPABILITY

Gentlemen, I have mentioned false computer alerts in the United States. Let me ask you a multiple question here, if I might. Is your assessment of the Soviet strategic warning capability that it is not as advanced and sophisticated as the United States? And also, both of you have talked about launch on warning, and I wonder how

great is the likelihood that the United States and the Soviet Union respectfully will move to a launch on warning if we approve the MX missile in fixed silos, and if there is a likelihood of that, what do you think the implications of that policy would be 5 to 10 years down the road?

Mr. BUNDY. I think launch on warning is something we are all much better off without. I think that systems of this kind do increase the pressure on military men to recommend that such a policy or such a capability be developed. And I think you will find in questioning military men on MX in Minuteman they really prefer not to discuss in open session the question of whether they would or wouldn't be in favor of launch on warning. I understand that. I am sorry to say that reluctance to me indicates that the question is a real one and that the danger that we would come to have such a reliance is real. That is at least as true for the Soviet Union, although I think you might be right their present capabilities are lower. But judging the long-run future on the basis of present Soviet capability is not wise. We have to think of what could happen over the whole 30-year history of this treaty. So I think we should bear in mind that an element of launch on warning is undefined in size and shape as a part of the MX in Minuteman recommendation, and that is one more reason, in my view, for being very, very doubtful that it is wise.

Chairman HATFIELD. Admiral.

Admiral TURNER. I believe the Soviets are behind us in a warning system but working assiduously to get ahead. Again, I do not have access to information so they may be progressing more rapidly than I would have thought.

LAUNCH ON WARNING DOCTRINE

Second, I believe the Soviets already are on launch on warning doctrine. I believe we have evidence that that is a capability that they have perfected or developed specifically to be able to do that, and to me it fits with the overall Soviet military psychology as being painstakingly careful to preclude being taken by surprise.

Chairman HATFIELD. Thank you very much, gentlemen. Someone said ealier that you came here with great stature and respect, even though there may be agreement and disagreement in your views, but I think you certainly acquitted yourselves admirably today and added to your stature as men of sensitive thinking and men of great patriotism and men who have given great service to your country. We are very grateful. I think this is very significant in the life of the committee and the Senate of the United States. We are hopeful out of these 3 days of hearings that we will have more englightenment, more understanding, and be able to perform our responsibility with greater wisdom, and you have added to that wisdom today. We are very happy that you were here and we may have some additional questions that may come in from some of the absent members who are unfortunately detained elsewhere. We don't want to burden you with a great deal of secretarial work, but we may like to have the opportunity to submit further questions to you at a later time.

[Clerk's Note: The submitted questions and answers will not be printed in the record. They will be retained in the committee files.]

COMMITTEE RECESS

Are there any other comments or remarks? If not, we will stand in recess until tomorrow at 9:30, in this room, when we will hear from Lieutenant General Scowcroft, the Chairman of the President's Commission on Strategic Forces; Mr. Kenneth Dam, the Deputy Secretary of State; and Rear Adm. Jonathan Howe, Director of the Bureau of Political Military Affairs in the Department of State.

The meeting is adjourned.

[Whereupon, at 12:03 p.m., Tuesday, May 3, the committee was recessed, to reconvene at 9:30 a.m., Wednesday, May 4.]

SENATE CONCURRENT RESOLUTION 26, A RESOLUTION TO APPROVE FUNDING FOR THE MX MISSILE

WEDNESDAY, MAY 4, 1983

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The committee met at 9:35 a.m., in room SD-192, Hon. Mark O. Hatfield (chairman) presiding.

Present: Senators Hatfield, Stevens, Rudman, Specter, Huddleston, Sasser, DeConcini, and Bumpers.

NONDEPARTMENTAL WITNESSES

PRESIDENT'S COMMISSION ON STRATEGIC FORCES

STATEMENT OF LT. GEN. BRENT SCOWCROFT, U.S. AIR FORCE (RETIRED), CHAIRMAN, PRESIDENT'S COMMISSION ON STRATEGIC FORCES

OPENING STATEMENT OF SENATOR HATFIELD

Chairman HATFIELD. The meeting will please come to order.

This is the second of 3 days of hearings to review the President's Commission Report on Strategic Forces and to consider the eventual release of $10.6 billion for deployment of the MX missile.

Yesterday, we received testimony from two distinguished witnesses, Adm. Stansfield Turner and Dr. McGeorge Bundy, who were both critical of the Commission's recommendation to place the MX missile in existing Minuteman silos and who were concerned about the implications of this decision on our arms control negotiations.

INTRODUCTION OF WITNESSES

This morning, we will hear from Gen. Brent Scowcroft, Chairman of the President's MX Commission, and Acting Secretary of State Mr. Kenneth Dam. While their respective views are likely to support the President's decision regarding the proposed basing mode for the MX, I would like to remind my colleagues and the audience that the statements and views of General Scowcroft and Acting Secretary Dam are independent views of the Commission and the Department of State and questions should be asked in such a way to preserve the independence of their respective positions.

Also appearing this morning is Rear Adm. Jonathan T. Howe of the Department of State, Director of the Bureau of Political and

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Military Affairs, and Mr. Ronald Lehman, Deputy Assistant Secretary of Defense for Strategic Theater and Nuclear Forces Policy.

I certainly want to thank all of you gentlemen for being here this morning. I know that you have many demands on your schedule and we are very appreciative of your availability to answer questions and give your testimony to this committee.

Tomorrow, Secretary Weinberger will provide the Defense Department's official statement at that hearing.

HEARING PROCEDURE

I want to make one further comment, and that is the procedure we use for the witness to give, in this case General Scowcroft, his testimony, and then we will pose questions to you, General, from the committee, with a 10-minute limitation on the members. I understand that there are time constraints on your schedule this morning, so we will have your testimony and questions and then excuse you, and then we will take Acting Secretary of State Dam and get his testimony, and he will then have to be excused for other schedule requirements and Admiral Howe will then join the panel for the rest of the testimony and answer questions, authorized by Acting Secretary of State Mr. Dam.

PREPARED STATEMENT

So with that general procedure, we are now happy to receive your testimony. Your full statement will be placed in the record, General, and if you wish to highlight to summarize, you may do so.

[The statement follows:]

PREPARED STATEMENT OF LT. GEN. BRENT SCOWCROFT, U.S. AIR FORCE, RETIRED, CHAIRMAN, PRESIDENT'S COMMISSION ON STRATEGIC FORCES

Chairman Hatfield, members of the committee; the President's Commission on Strategic Forces, as established on January 3 of this year, met over a period of 3 months in the process of arriving at the recommendations which are contained in the report. This report, which was released to the public on Monday, April 11, reflects the advice of numerous counselors and advisors and represents the unanimous position of the members of the Commission.

I understand you have all received a copy of the report. I will therefore, restrict my comments to a summary of the recommendations of the Commission. My associates and I will then be happy to respond to any questions or comments you may have.

The Report begins by outlining the central dilemma of this major issue—that of coping with Soviet expansionism while preventing the devastation of a nuclear war. We then go on to discuss the nature and the requirements of deterrence and the manner in which arms control can make a contribution to that deterrence. We point out that the Soviets place great emphasis on their military forces, at least as a backdrop for their political designs.

As an example, Soviet investment in ICBM forces underscores the importance, in their eyes, of the role that those forces play. Thus, since the deployment of the last U.S. ICBM—the Minuteman III—the Soviets have deployed the SS–17, SS–18, and SS–19—over 600 missiles of MX size or larger. And they are, now, in the process of testing two new ones.

Since the fundamental purpose of U.S. strategic forces is deterrence, it is vital for us to comprehend fully the importance of military power in the Soviet scheme of things. In response, in order to maintain and enhance deterrence, the United States has been modernizing its strategic forces. The report discusses that modernization,

with emphasis, of course, on ICBM forces—which are at the heart of our current, national problem with respect to strategic force modernization.

Our report recommends what we feel is an important new departure. We are now proposing new directions, both in ICBM forces and in arms control. That new departure, fundamentally, is to integrate strategic force programs with arms control, and to move both in the direction of stability.

We would accomplish this through a three-part program. The first part would be the immediate deployment of something like 100 MX missiles for a number of reasons, among which are the following:

First, to demonstrate U.S. national will and cohesion. We have now had four Presidents who have said that the MX is important, if not essential, to our national security. Failure to carry through with this program would hardly demonstrate to the Soviets that we have that will which is an essential element of deterrence.

Next, in order to reduce the substantial imbalance in the capability of U.S. ICBM forces compared to those of the Soviet Union. The Soviets can, with their ICBM forces, put our forces and other critical targets at risk in a way that the United States can not begin to match. This is an important element of instability.

Also, and very importantly, the MX is essential to induce the Soviets toward negotiation, especially negotiations on an arms control framework which would permit us, and encourage them, to move in the direction of greater stability.

For the longer run, the Commission proposes engineering design of a small, single warhead missile as the second part of our program looking toward deployment probably in the early 1990's. We suggest a single-warhead missile in order to reduce the value of the target, making it unremunerative to attack and, thus, enhancing the capability of the force—and small in order to open up, to a maximum extent, the opportunities for survivable basing, almost certainly to include mobile basing.

Finally, in order to provide an environment which will support the deployment of a small missile, a new departure in arms control is needed. Counting by launchers has, perversely, led us to the present structure of very high-value targets, large missiles each with a number of warheads.

We must, therefore, turn to counting the forces on both sides by warheads, not by launchers. After moving to count warheads, it would then be useful to cap or reduce the numbers sharply, in order that a deployment of great numbers of small missiles would not be necessary.

This, in turn, gets us back to the MX, which is essential to induce the Soviets to negotiate away what is currently a favorable strategic position for them in ICBM forces. Hopefully, it will as well encourage them to move in the same strategic direction by making clear that their huge missiles in silos are a wasting asset.

For this, we believe that MX deployed in Minuteman silos is an adequate deployment at reasonable cost. It is true that, whatever the current survivability of Minuteman silos, they are becoming more vulnerable. We do propose a vigorous R&D program on silo hardening and, of course, would take advantage of any developments which result from that research, either for the MX or, conceivably, for the small missile.

However, the fundamental requirement for survivability of our ICBM force is as a hedge against a Soviet breakthrough in antisubmarine warfare which could endanger our submarine launched, ballistic missiles. We do not see that on the horizon at the present time. For the longer run, we are proposing the small missile to provide that hedge by enhancing the survivability of the ICBM force.

For the present, we believe that silo vulnerability is not so dominant a part of the overall problem as to require other immediate steps. We believe that the Soviets must have some uncertainties about their operational capabilities, notwithstanding whatever their test accuracies may indicate to them. Especially, however, we believe there still is an important synergistic survivability between the ICBM forces and the bomber forces, in that it is difficult, if not impossible, for the Soviets to attack both of them simultaneously.

That, in brief, is an outline of our recommendations. Few, if any, will consider our recommendations an optimal solution. If such were available, this Commission probably would not have been convened. We have tried to construct an approach which is different in kind. We are proposing a major, new departure for the United States in the direction of enhanced stability for our strategic forces and, hopefully, an approach which will permit a consensus to develop, allowing us to put the divisiveness of the past—both in arms control and in our ICBM force modernization—behind us and allow us to move forward with a more common perspective in our efforts to preserve both peace and freedom.

General SCOWCROFT. Thank you very much, Mr. Chairman, members of the committee. It is a pleasure for me to be here with you to explain the conclusions and recommendations of the President's Commission on Strategic Forces.

Since you do have the report and my statement, I will make simply some summary remarks.

Chairman HATFIELD. The report will be made a part of the official record at this place.

[The report follows:]

REPORT OF

PRESIDENT'S COMMISSION ON STRATEGIC FORCES

6 April 1983

The President
The White House
Washington, D. C. 20500

Dear Mr. President:

On January 3 of this year you asked us to review the strategic modernization program of the United States. In particular, you asked us to examine the future of our ICBM forces and to recommend basing alternatives.

In the ensuing three months we have held 28 full meetings and numerous smaller conferences, and have talked to over 200 technical experts as we have reviewed U.S. strategic policy and forces. We have also consulted closely with members of Congress, as you requested.

There are no simple solutions to the questions that must be answered in basing our forces, achieving equitable arms control agreements, and improving strategic stability. Our lengthy review and extended deliberations, however, have led us unanimously to conclusions and recommendations which we hope will provide the basis for a broad national consensus on these difficult issues. The Commission's Senior Counselors set forth below also support the recommendations of this report. Our recommendations and the reasoning behind them are set forth in the attached report.

We appreciate the opportunity to be of service. We hope our efforts will prove helpful in the Nation's pursuit of peace and security.

Respectfully yours,

Brent Scowcroft
Chairman

The Commission

Nicholas F. Brady
William Clements
John M. Deutch
Alexander M. Haig, Jr.
Richard Helms
John H. Lyons
William J. Perry
Thomas C. Reed
Levering Smith
R. James Woolsey

Senior Counselors to the Commission

Harold Brown
Lloyd N. Cutler
Henry A. Kissinger
Melvin R. Laird
John McCone
Donald H. Rumsfeld
James R. Schlesinger

Marvin C. Atkins
Executive Secretary

Report of the President's Commission On Strategic Forces

I. Deterrence and Arms Control

The responsibility given to this Commission is to review the purpose, character, size, and composition of the strategic forces of the United States. The members of the Commission fully understand not only the purposes for which this nation maintains its deterrent, but also the devastating nature of nuclear warfare, should deterrence fail. The Commission believes that effective arms control is an essential element in diminishing the risk of nuclear war—while preserving our liberties and those of like-minded nations. At the same time the Commission is persuaded that as we consider the threat of mass destruction we must consider simultaneously the threat of aggressive totalitarianism. Both are central to the political dilemmas of our age. For the United States and its allies the essential dual task of statecraft is, and must be, to avoid the first and contain the second.

It is only by addressing these two issues together that we can begin to understand how to preserve both liberty and peace. Although the United States and the Soviet Union hold fundamentally incompatible views of history, of the nature of society, and of the individual's place in it, the existence of nuclear weapons imbues that rivalry with peril unprecedented in human history. The temptation is sometimes great to simplify—or oversimplify—the difficult problems that result, either by blinking at the devastating nature of modern full-scale war or by refusing to acknowledge the emptiness of life under modern totalitarianism. But it is naive, false, and dangerous to assume that either of these, today, can be ignored and the other dealt with in isolation. We cannot cope with the efforts of the Soviet Union to extend its power without giving thought to the way nuclear weapons have sharply raised the stakes and changed the nature of warfare. Nor can we struggle against nuclear war or the arms race in some abstract sense without keeping before us the Soviet Union's drive to expand its power, which is what makes those struggles so difficult.

We should face both problems directly.

Our words, policies, and actions should all make clear the American conviction that nuclear war, involving few or many nuclear weapons, would be a tragedy of unparalleled scope for humanity. It is wrong to pretend or suggest otherwise. Neither the American people, our allies, nor the Soviets should doubt our abhorrence of nuclear war in any form.

By the same token, however, our task as a nation cannot be understood from a position of moral neutrality toward the differences between liberty and totalitarianism. These differences proceed from conflicting views regarding the rights of individuals and the nature of society. Only if Americans believe that it is worth a sustained effort over the years to preserve liberty in the face of challenge by a system that is the antithesis of liberal values can our task be seen as a just and worthy one in spite of its dangers.

We do have many strengths in such an effort. Over the long run, the strengths lent by liberty itself are our greatest ones—our abilities to adapt peacefully to political change, to improve social justice, to innovate with technology, to produce what our people need to live and prosper. What we have most to fear is that confusion and internal divisions—sometimes byproducts of the vigorous play of our free politics—will lead us to lose purpose, hope, and resolve.

We have good reason to maintain all three. Neither time nor history is on the side of large, centralized, autocratic systems that seek to achieve and maintain control over all aspects of the lives of many diverse peoples. We should, with calm persistence, limit the expansion of today's version of this sort of totalitarian state, the Soviet Union. We

should persuade its leaders that they cannot successfully divert attention from internal problems by resorting to international blackmail, expansion, and militarism—rationalized by alleged threats posed by us or our allies. We should also be ready to encourage the Soviets to begin to settle differences between us, through equitable arms control agreements and other measures. But moral neutrality and indifference or acquiescence in the face of Soviet efforts to expand their military and political power do not hasten such settlements—they delay them, make them less likely, and ultimately increase the risk of war.

Deterrence is central to the calm persistence we must demonstrate in order to reduce these risks. American strategic forces exist to deter attack on the United States or its allies—and the coercion that would be possible if the public or decisionmakers believed that the Soviets might be able to launch a successful attack. Such a policy of deterrence, like the security policy of the West itself, is essentially defensive in nature. The strategic forces that are necessary in order to support such a policy by their very existence help to convince the Soviet Union's leaders: that the West has the military strength and political will to resist aggression; and that, if they should ever choose to attack, they should have no doubt that we can and would respond until we have so damaged the power of the Soviet state that they will unmistakably be far worse off than if they had never begun.

There can be no doubt that the very scope of the possible tragedy of modern nuclear war, and the increased destruction made possible even by modern non-nuclear technology, have changed the nature of war itself. This is not only because massive conventional war with modern weapons could be horrendously destructive—some fifty million people died in "conventional" World War II before the advent of nuclear weapons—but also because *conventional* war between the world's major power blocs is the most likely way for *nuclear* war to develop. The problem of deterring the threat of nuclear war, in short, cannot be isolated from the overall power balance between East and West. Simply put, it is war that must concern us, not nuclear war alone. Thus we must maintain a balance between our nuclear and conventional forces and we must demonstrate to the Soviets our cohesion and our will. And we must understand that weakness in any one of these areas puts a dangerous burden on the others as well as on overall deterrence.

Deterrence is not, and cannot be, bluff. In order for deterrence to be effective we must not merely have weapons, we must be perceived to be able, and prepared, if necessary, to use them effectively against the key elements of Soviet power. Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what would deter ourselves. Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to determine, as best we can, what would deter them from considering aggression, even in a crisis—not to determine what would deter us.

Our military forces must be able to deter war even if the Soviets are unwilling to participate with us in equitable and reasonable arms control agreements. But various types of agreements can, when the Soviets prove willing, accomplish critical objectives. Arms control can: reduce the risk of war; help limit the spread of nuclear weapons; remove or reduce the risk of misunderstanding of particular events or accidents; seal off wasteful, dangerous, or unhelpful lines of technical development before either side gets too committed to them; help channel modernization into stabilizing rather than destabilizing paths; reduce misunderstanding about the purpose of weapons developments and thus reduce the need to over-insure against worst-case projections; and help make arsenals less destructive and costly. To achieve part or all of these positive and useful goals, we must keep in mind the importance of compliance and adequate verification—difficult problems in light of the nature of the Soviet state—and the consequent importance of patience in order to reach fair and reasonable agreements.

This is a vital and challenging agenda. In some of these areas of arms control our

interests coincide closely with those of the Soviets. In others, their efforts to undermine the effectiveness of our deterrent and to use negotiations to split us from our allies will make negotiations difficult.

But whether the Soviets prove willing or not, stability should be the primary objective both of the modernization of our strategic forces and of our arms control proposals. Our arms control proposals and our strategic arms programs should thus be integrated and be mutually reinforcing. They should work together to permit us, and encourage the Soviets, to move in directions that reduce or eliminate the advantage of aggression and also reduce the risk of war by accident or miscalculation. As we try to enhance stability in this sense, the Commission believes that other objectives should be subordinated to the overall goal of permitting the United States to move—over time—toward more stable strategic deployments, and giving the Soviets the strong incentive to do the same. Consequently it believes, for the reasons set forth below, that it is important to move toward reducing the value and importance of individual strategic targets.

II. Soviet Objectives and Programs

Effective deterrence and effective arms control have both been made significantly more difficult by Soviet conduct and Soviet weapons progams in recent years. The overall military balance, including the nuclear balance, provides the backdrop for Soviet decisions about the manner in which they will try to advance their interests. This is central to our understanding of how to deter war, how to frustrate Soviet efforts at blackmail, and how to deal with the Soviets' day-to-day conduct of international affairs. The Soviets have shown by word and deed that they regard military power, including nuclear weapons, as a useful tool in the projection of their national influence. In the Soviet strategic view, nuclear weapons are closely related to, and are integrated with, their other military and political instruments as a means of advancing their interests. The Soviets have concentrated enormous effort on the development and modernization of nuclear weapons, obviously seeking to achieve what they regard as important advantages in certain areas of nuclear weaponry.

Historically the Soviets have not been noted for taking large risks. But one need not take the view that their leaders are eager to launch a nuclear war in order to understand the political advantages that a massive nuclear weapons buildup can hold for a nation seeking to expand its power and influence, or to comprehend the dangers that such a motivation and such a buildup hold for the rest of the world.

Although there is legitimate debate about the exact scope of Soviet military spending in recent years, it is nonetheless clear that the Soviet leaders have embarked upon a determined, steady increase in nuclear (and conventional) weapons programs over the last two decades—a buildup well in excess of any military requirement for defense.

For example, as a result of this determined investment the Soviet ICBM force has grown to nearly 1,400 launchers carrying over 5,000 warheads, with a throw-weight about four times that of the U.S. ICBM force. The U.S. ICBM force has 1,047 launchers and about 2,150 warheads. More than half of the Soviet ICBMs—the SS-17, SS-18, and SS-19 missiles—have been deployed since the last U.S. ICBM was deployed. These new Soviet ICBMs are equipped with multiple, independently targetable reentry vehicles (MIRVs). Over 600 of these recently-deployed missiles, the SS-18s and SS-19s, have payloads as large or larger than the MX and have excellent accuracy. Many Soviet launchers can be reloaded. The Soviets are now pushing forward with tests of two even newer ICBMs.

While Soviet operational missile performance in wartime may be somewhat less accurate than performance on the test range, the Soviets nevertheless now probably possess the necessary combination of ICBM numbers, reliability, accuracy, and warhead yield to destroy almost all of the 1,047 U.S. ICBM silos, using only a portion of their

own ICBM force. The U.S. ICBM force now deployed cannot inflict similar damage, even using the entire force. Only the 550 MIRVed Minuteman III missiles in the U.S. ICBM force have relatively good accuracy, but the combination of accuracy and yield of their 3 warheads is inadequate to put at serious risk more than a small share of the many hardened targets in the Soviet Union. Most Soviet hardened targets—of which ICBM silos are only a portion—could withstand attacks by our other strategic missiles.

The Soviet ballistic missile submarine force currently consists of 62 modern submarines; these are armed with 950 missiles, with a total of almost 2,000 nuclear warheads. The U.S. has fewer such submarines (34) and missiles (568), but more warheads (about 5,000), in its submarine force. Our submarines, moreover, are quieter than those of the Soviets. Recent Soviet ballistic missile submarine building programs have been vigorous: four times that of the U.S. rate. While the U.S. has a substantial present advantage in the overall capability of its ballistic missile submarine force, this gap is narrowing. The U.S. also has a present advantage in anti-submarine warfare and submarine quietness, but the Soviets appear to be giving high priority to these areas.

Soviet heavy strategic bombers (not including the Backfire) now number about 150, around half equipped with air-to-surface missiles. This force is considerably less capable than the total active U.S. bomber force, which numbers about 270 B52 G and H bombers and about 60 FB-111 bombers. The U.S. bomber force has just begun to be equipped with long-range cruise missiles. Both U.S. and Soviet bombers have carried short-range missiles for many years. A new Soviet intercontinental bomber (the Blackjack) is now being flight-tested. It is similar in appearance to, but larger than, the U.S. B-1B now in production. The Blackjack will probably begin to enter service during the mid-to-late 1980s.

Soviet strategic defenses are extensive, consisting of a dense nationwide air defense network and a limited ballistic missile defense at Moscow. Both are undergoing modernization. Their vigorous research and development programs on ballistic missile defense provide a potential, however, for a rapid expansion of Soviet ABM defenses, should they choose to withdraw from or violate the ABM treaty. Such a potential is enhanced by the continued deployment of modern and capable Soviet air defense missile systems. At least one new Soviet defensive system is designed to have capability against short-range ballistic missiles; it could perhaps be upgraded for use against the re-entry vehicles of some submarine-launched missiles and even ICBMs. Proliferation of such Soviet air defense missile systems thus creates a need for us to have enough throw-weight to carry sufficient numbers of warheads, and penetration aids such as decoys, in order to be assured of maintaining a deterrent. The U.S. has dismantled its ABM system and has minimal continental air defenses.

These Soviet programs do not, in and of themselves, indicate plans to initiate nuclear attacks. But they do confirm the value that Soviet leaders place on military programs across the board, both to provide an essential backdrop for their political purposes and—should circumstances dictate—to give them the capability to fight effectively. They also understand that the success of their efforts depends upon the outside world's perception. If comparative military trends were to point toward their becoming superior to the West in each of a number of military areas, they might consider themselves able to raise the risks in a crisis in a manner that could not be matched.

In a world in which the balance of strategic nuclear forces could be isolated and kept distinctly set apart from all other calculations about relations between nations and the credibility of conventional military power, a nuclear imbalance would have little importance unless it were so massive as to tempt an aggressor to launch nuclear war. But the world in which we must live with the Soviets is, sadly, one in which their own assessments of these trends, and hence their calculations of overall advantage, influence heavily the vigor with which they exercise their power.

III. Preventing Soviet Exploitation of Their Military Programs

In our effort to make a strategy of deterrence and arms control effective in preventing the Soviets from political or military use of their strategic forces, we must keep several points in mind.

The Soviets must continue to believe what has been NATO's doctrine for three decades: that if we or our allies should be attacked—by massive conventional means or otherwise—the United States has the will and the means to defend with the full range of American power. This by no means excludes the need to make improvements in our conventional forces in order to have increased confidence in our ability to defend effectively at the conventional level in many more situations, and thus to raise the nuclear threshold. Certainly mutual arms control agreements to reduce both sides' reliance on nuclear weapons should be pursued. But effective deterrence requires that early in any Soviet consideration of attack, or threat of attack, with conventional forces or chemical or biological weapons, Soviet leaders must understand that they risk an American nuclear response.

Similarly, effective deterrence requires that the Soviets be convinced that they could not credibly threaten us or our allies with a limited use of nuclear weapons against military targets, in one country or many. Such a course of action by them would be even more likely to result in full-scale nuclear war than would a massive conventional attack. But we cannot discount the possibility that the Soviets would implicitly or explicitly threaten such a step in some future crisis if they believed that we were unprepared or unwilling to respond. Indeed lack of preparation or resolve on our part would make such blackmail distinctly more probable.

In order to deter such Soviet threats we must be able to put at risk those types of Soviet targets—including hardened ones such as military command bunkers and facilities, missile silos, nuclear weapons and other storage, and the rest—which the Soviet leaders have given every indication by their actions they value most, and which constitute their tools of control and power. We cannot afford the delusion that Soviet leaders—human though they are and cautious though we hope they will be—are going to be deterred by exactly the same concerns that would dissuade us. Effective deterrence of the Soviet leaders requires them to be convinced in their own minds that there could be no case in which they could benefit by initiating war.

Effective deterrence of any Soviet temptation to threaten or launch a massive conventional or a limited nuclear war thus requires us to have a comparable ability to destroy Soviet military targets, hardened and otherwise. If there were ever a case to be made that the Soviets would unilaterally stop their strategic deployments at a level short of the ability seriously to threaten our forces, that argument vanished with the deployment of their SS-18 and SS-19 ICBMs. A one-sided strategic condition in which the Soviet Union could effectively destroy the whole range of strategic targets in the United States, but we could not effectively destroy a similar range of targets in the Soviet Union, would be extremely unstable over the long run. Such a situation could tempt the Soviets, in a crisis, to feel they could successfully threaten or even undertake conventional or limited nuclear aggression in the hope that the United States would lack a fully effective response. A one-sided condition of this sort would clearly not serve the cause of peace.

In order, then, to pursue successfully a policy of deterrence and verifiable, stabilizing arms control we must have a strong and militarily effective nuclear deterrent. Consequently our strategic forces must be modernized, as necessary, to enhance to an adequate degree their overall survivability and to enable them to engage effectively the targets that Soviet leaders most value.

Also, as described below, we should seek to use arms control agreements to reduce instabilities and to channel both sides' strategic modernization toward stabilizing developments, deployments, and reductions. Regardless of what we are able to accomplish with arms control agreements, however, two aspects of deterrence are crucial.

The problems of maintaining an effective deterrent and of reaching stabilizing and verifiable arms control agreements cannot be addressed coherently without keeping in mind the nature of Soviet expansionism. Second, the deterrent effect of our strategic forces is not something separate and apart from the ability of those forces to be used against the tools by which the Soviet leaders maintain their power. Deterrence, on the contrary, requires military effectiveness.

IV. U.S. Strategic Forces and Trends

A. Strategic Forces As A Whole

The development of the components of our strategic forces—the multiplicity of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and bombers—was in part the result of an historical evolution. This triad of forces, however, serves several important purposes.

First, the existence of several strategic forces requires the Soviets to solve a number of different problems in their efforts to plan how they might try to overcome them. Our objective, after all, is to make their planning of any such attack as difficult as we can. If it were possible for the Soviets to concentrate their research and development efforts on putting only one or two components of U.S. strategic forces at risk—e.g., by an intensive effort at anti-submarine warfare to attempt to threaten our ballistic missile submarines—both their incentive to do so and their potential gains would be sharply increased. Thus the existence of several components of our strategic forces permits each to function as a hedge against possible Soviet successes in endangering any of the others. For example, at earlier times uncertainties about the vulnerability of our bomber force were alleviated by our confidence in the survivability of our ICBMs. And although the survivability of our ICBMs is today a matter of concern (especially when that problem is viewed in isolation) it would be far more serious if we did not have a force of ballistic missile submarines at sea and a bomber force. By the same token, over the long run it would be unwise to rely so heavily on submarines as our only ballistic missile force that a Soviet breakthrough in anti-submarine warfare could not be offset by other strategic systems.

Second, the different components of our strategic forces would force the Soviets, if they were to contemplate an all-out attack, to make choices which would lead them to reduce significantly their effectiveness against one component in order to attack another. For example, if Soviet war planners should decide to attack our bomber and submarine bases and our ICBM silos with simultaneous detonations—by delaying missile launches from close-in submarines so that such missiles would *arrive* at our bomber bases at the same time the Soviet ICBM warheads (with their longer time of flight) would arrive at our ICBM silos—then a very high proportion of our alert bombers would have escaped before their bases were struck. This is because we would have been able to, and would have, ordered our bombers to take off from their bases within moments after the launch of the first Soviet ICBMs. If the Soviets, on the other hand, chose rather to *launch* their ICBM and SLBM attacks at the same moment (hoping to destroy a higher proportion of our bombers with SLBMs having a short time of flight), there would be a period of over a quarter of an hour after nuclear detonations had occurred on U.S. bomber bases but before our ICBMs had been struck. In such a case the Soviets should have no confidence that we would refrain from launching our ICBMs during that interval after we had been hit. It is important to appreciate that this would not be a "launch-on-warning," or even a "launch under attack," but rather a launch *after* attack—after massive nuclear detonations had already occurred on U.S. soil.

Thus our bombers and ICBMs are more survivable together against Soviet attack than either would be alone. This illustrates that the different components of our strategic forces should be assessed collectively and not in isolation. It also suggests that whereas

it is highly desirable that a component of the strategic forces be survivable when it is viewed separately, it makes a major contribution to deterrence even if its survivability depends in substantial measure on the existence of one of the other components of the force.

The third purpose served by having multiple components in our strategic forces is that each component has unique properties not present in the others. Nuclear submarines have the advantage of being able to stay submerged and hidden for months at a time, and thus the missiles they carry may reasonably be held in reserve rather than being used early in the event of attack. Bombers may be launched from their bases on warning without irretrievably committing them to an attack; also, their weapons, though they arrive in hours, not minutes, have excellent accuracy against a range of possible targets. ICBMs have advantages in command and control, in the ability to be retargeted readily, and in accuracy. This means that ICBMs are especially effective in deterring Soviet threats of massive conventional or limited nuclear attacks, because they could most credibly respond promptly and controllably against specific military targets and thereby promptly disrupt an attack on us or our allies.

B. Technological Trends for Strategic Forces

1. Accuracy

The accuracy of strategic weapons in the foreseeable future will continue to increase. There are lower limits, perhaps a few hundred feet, to the accuracy of strategic weapons that do not rely on some kind of terminal guidance. For weapons using terminal guidance, accuracy should be even better. Accuracy is most advanced today in the ICBM forces, but in the 1990s SLBMs should have sufficient accuracy seriously to threaten hardened targets. Nevertheless, ICBM accuracy should remain somewhat better than that for submarine-launched missiles.

These accuracy developments and the ability of an attacker to use more than one warhead to attack each fixed target on the other side increasingly put at risk targets of high value such as fixed launchers for MIRVed ICBMs. Although such fixed targets may retain some survivability for a number of years—because of problems of operational accuracies, planning uncertainties (as discussed at Section V.E. below), and the previously described need to co-ordinate ICBM and SLBM attacks—their survivability will nevertheless continue to decline over time. Thus reasonable survivability of fixed targets, such as ICBM silos, may not outlast this century, even when one considers them together with the rest of our strategic forces. In time, even non-nuclear weapons with excellent accuracy may be able to attack effectively some fixed targets previously thought to be vulnerable only to nuclear weapons.

2. Superhardening

New concepts and developments in hardening are quite promising. They could lead to the capability to harden such targets as ICBM silos far in excess of what was thought possible only a short time ago. Eventually the survival of even the hardest such targets would be doubtful in light of the accuracy improvements described above. Nonetheless increased hardness would raise the weapons requirements and the risk of attack for some years. Hardening will also be able to postpone vulnerability to, and therefore the probability of, attack by submarine-launched ballistic missiles.

3. Mobility

New techniques in guidance, miniaturization of electronic components, hardening against nuclear effects, and solid fuels will continue to make mobile strategic systems

more feasible. Strategically useful hardening of land-based mobile launchers appears more feasible than in the past.

4. Anti-submarine Warfare

The problem of conducting open-ocean search for submarines is likely to continue to be sufficiently difficult that ballistic missile submarine forces will have a high degree of survivability for a long time. Nevertheless, the prospect of concentrating all of the submarine-launched missiles at sea in a few very large submarines raises some concern. Communication links with submarines, while likely to improve, will still offer problems not present for land-based systems.

5. Ballistic Missile Defense

Substantial progress has been made in the last decade in the development of both endo-atmospheric and exo-atmospheric ABM defenses. However, applications of current technology offer no real promise of being able to defend the United States against massive nuclear attack in this century. An easier task is to provide ABM defense for fixed hardened targets, such as ICBM silos. However even this will be a difficult feat if an attacker can use a large number of warheads against each defended target. The effectiveness of such a defense could be enhanced by some types of bunching and close spacing of the defended targets, in order to reduce the number of ABM systems required. It could also be enhanced by having multiple shelters for each missile and preferentially defending only the shelter containing the missile while facing an attacker with the need to attack all shelters.

Improvements in Soviet air defense systems—to give them some capability against some submarine-launched ballistic missile warheads, and even against some warheads fired by ICBMs—are likely to continue as such air defenses are made capable of dealing with modern aircraft, cruise missiles, and shorter-range ballistic missiles. The 1972 ABM treaty, however, has provisions prohibiting the testing of air defense systems as ABMs.

V. Strategic Modernization Programs

Although there is room for improvement and adjustments in the several strategic programs discussed below, the Commission noted that these programs are—in the main—proceeding reasonably well. Therefore this report concentrates on the current issues presented by the ICBM force (Section E below) and its relation to arms control (Section VI). The current and recommended programs, taken as a package, should give us high confidence in maintaining an effective deterrent in the years to come.

A. Command, Control, and Communications

Our first defense priority should be to ensure that there is continuing, constitutionally legitimate, and full control of our strategic forces under conditions of stress or actual attack. No attacker should be able to have any reasonable confidence that he could destroy the link between the President and our strategic forces.

The Commission urges that this program continue to have the highest priority and urges the investigation of ways in which the planned improvements could be augmented by low-cost back-up systems.

B. Sea-based Missile Programs

1. Deployment

The Commission supports the continuation of the Trident submarine construction program. It also supports the continued development and the deployment of the Trident II (D-5) missile as rapidly as its objectives of range, accuracy, and reliability can be attained. The Trident submarine's significantly reduced noise level and the D-5 missile's greater full-payload range will add importantly to the already high degree of survivability of the ballistic missile submarine force. Given the increased importance of that force, both programs are essential. The D-5 missile's greater accuracy will also enable it to be used to put some portion of Soviet hard targets at risk, a task for which the current Trident I (C-4) missile is not sufficiently accurate. The Commission also stresses the importance of the command, control, and communication improvements of particular relevance to the submarine force—namely the ELF communication system, the ECX aircraft, and the MILSTAR satellite.

The Commission does not recommend the development and deployment of a system for the launch of ballistic missiles from surface ships. Such a system appears to have no net advantage over submarine basing and would have vulnerabilities that submarines do not possess.

For the reasons stated in section IV.A., above, the Commission recommends strongly against adopting a strategic force posture relying solely on submarines and bombers to the exclusion of ICBM modernization; it recognizes, however, the increasing importance of the ballistic missile submarine force.

2. Research

The Commission notes that—although it believes that the ballistic missile submarine force will have a high degree of survivability for a long time—a submarine force ultimately consisting solely of a relatively few large submarines at sea, each carrying on the order of 200 warheads, presents a small number of valuable targets to the Soviets. Vigorous pursuit of the longstanding program to avoid technological surprise by the Soviets in anti-submarine warfare is thus of vital importance.

Consistent with the long-term program recommended for the ICBM force, below, to reduce the value of individual targets, the Commission recommends that research begin now on smaller ballistic-missile carrying submarines, each carrying fewer missiles than the Trident, as a potential follow-on to the Trident submarine force. The objective of such research should be to design a submarine and missile system that would, as much as possible, reduce the value of each platform and also present radically different problems to a Soviet attacker than does the Trident submarine force. This work should proceed in such a way that a decision to construct and deploy such a submarine force could be rapidly implemented should Soviet progress in anti-submarine warfare so dictate.

C. Bomber and Air-Launched Cruise Missile Programs

Our bomber and air-launched cruise missile force is of vital importance to the maintenance of an effective deterrent. As long as its ability to survive and penetrate Soviet defenses can be maintained, it provides unique advantages of its own as a strategic system. It also provides mutual support to the survivability of the ICBM force, as discussed in Section IV.A., above. Furthermore the Commission bases its other recommendations on the assumption that a strong bomber and cruise missile program is continued. The Commission is unanimous in these views although it recognizes that there are legitimate differences about the best and least expensive way to provide for the necessary

modernization of the bomber and cruise missile force. Since these modernization decisions, although not wholly independent of other strategic force decisions, may reasonably be considered within their own framework, the Commission—having concentrated its efforts on the ballistic missile forces and related issues—has no changes to recommend in these bomber and cruise missile programs.

D. Ballistic Missile Defense

Vigorous research and development on ABM technologies—including, in particular, ways to sharpen the effectiveness of treaty-limited ABM systems with new types of nuclear systems and also ways to use non-nuclear systems—are imperative to avoid technological surprise from the Soviets. Such a vigorous program on our part also decreases any Soviet incentive—based on an attempt to achieve unilateral advantage—to abrogate the ABM treaty. At this time, however, the Commission believes that no ABM technologies appear to combine practicality, survivability, low cost, and technical effectiveness sufficiently to justify proceeding beyond the stage of technology development.

Of particular importance, however, is the ability to counter any improvement in Soviet ABM capability by being able to maintain the effectiveness of our offensive systems. The possibility of either a sudden breakthrough in ABM technology, a rapid Soviet breakout from the ABM treaty by a quick further deployment of their current ABM systems, or the deployment of air defense systems also having some capability against strategic ballistic missiles all point to the need for us to be able to penetrate some level of ABM defense. This dictates continued attention to having sufficient throw-weight for adequate numbers of warheads and of decoys and other penetration aids.

E. ICBM Programs.

The problem that led to the establishment of this Commission is the same one that has been at the heart of much of the controversy concerning strategic forces and arms control for over a decade—the future of our ICBM force. As described above (Section IV.A.) our ICBM force has three main strategic purposes: (1) serving as a hedge against possible vulnerabilities in our submarine force; (2) introducing complexity and uncertainty into any plan of Soviet attack, because of the different types of attacks that would have to be launched against our ICBMs and our bombers; and (3) helping to deter Soviet threats of massive conventional or limited nuclear attacks by the ability to respond promptly and controllably against hardened military targets.

ICBM modernization is also particularly important now in order to encourage the Soviets to reach stabilizing arms control agreements and to redress perceived U.S. disadvantages in strategic capability.

The Commission believes that, because of changing technology, arms control negotiations, and our own domestic political process, this issue—the future of our ICBM force—has come to be miscast in recent years.

To many the problem has become: "How can a force consisting of relatively large, accurate land-based ICBMs be deployed quickly and be made survivable, even when it is viewed in isolation from the rest of our strategic forces, in the face of increasingly accurate threatened attacks by large numbers of warheads--and how can this be done under arms control agreements that limit or reduce launcher numbers?" It is this complex problem that many, inside and outside the government, have sought to solve for a variety of reasons. These reasons fall into five main groups.

First, in order to serve one of the necessary purposes of a strategic force—namely to hedge against possible failure by the others, such as would be caused by a Soviet breakthrough in anti-submarine warfare—many have felt that any new ICBM deployment should be almost totally survivable even when viewed in isolation from our bomber force and the rest of our strategic forces. The threat now posed by accurate Soviet ICBMs

to the Minuteman force, viewed in isolation, has also led many to argue that this particular survivability problem has to be solved quickly.

Second, the overall perception of strategic imbalance caused by the Soviets' ability to destroy hardened land-based targets—with more than 600 newly-deployed SS-18 and SS-19 ICBMs—while the U.S. is clearly not able to do so with its existing ballistic missile force, has been reasonably regarded as destabilizing and as a weakness in the overall fabric of deterrence. In particular, since the ICBM force helps to deter massive conventional or limited nuclear attack against us or our allies, this has led many to believe that the serious imbalance between U.S. and Soviet capabilities should be rectified quickly in the overall interest of the alliance.

Third, arms control agreements—in part to be verifiable without resort to the sorts of co-operative measures such as on-site inspection typically opposed by the Soviets—have concentrated to a significant degree on limiting or reducing strategic missile launchers rather than warheads. This is in some measure because launchers are more easily counted by satellite reconnaissance than are other ICBM characteristics and because launcher numbers provide relatively unambiguous terms for a treaty. Launcher or missile limits have the indirect effect, however, of encouraging both sides to build large ICBMs with many warheads.

Fourth, if one sets aside survivability, basing, and other cost considerations and looks solely at the cost of the missiles themselves, it is cheaper to deploy a given number of warheads in a few relatively large missiles than to deploy the same number of warheads on a larger number of smaller missiles. Fewer expensive guidance systems need to be purchased, for example.

Fifth, for almost two decades our minuteman ICBM force had virtually all of the positive characteristics desirable for any strategic system. It was survivable, even when an attack on it was viewed in isolation, because Soviet accuracies were not good enough to threaten silos. Command and control was comparatively easy. ICBMs were more accurate than submarine-based missiles and could reach their targets faster than bombers. And, when compared to either submarine-based missiles or bombers, silo-based ICBMs, once purchased, had strikingly low annual operating costs. This history has led many to continue to seek to replicate those two decades of Minuteman history, and in so doing to try not only to meet these objectives, but to do so with a single way of basing a single type of ICBM that would have all of these desirable characteristics.

These five sets of considerations, different ones of them of greater importance to different decision-makers at different times, have led us as a nation in recent years to try to re-create all of the desirable characteristics that Minuteman possessed during the sixties and much of the seventies. We have tried to do so by deploying a few relatively large missiles as quickly as possible, in a single basing mode, on land, under arms control agreements limiting or reducing launcher numbers, in the face of a threat of attack by increasingly accurate and numerous warheads—and to do so in a manner that seeks to preserve ICBM survivability for the long term, even when the ICBM force is viewed in isolation. But by trying to solve all ICBM tasks with a single weapon and a single basing mode in the face of the trends in technology, we have made the problem of modernizing the ICBM force so complex as to be virtually insoluble.

In arriving at its recommendations regarding ICBM programs, the Commission was mindful of the following criteria. For the near term, it would concentrate on possible deployments and basing modes that appeared to have straightforward and achievable technical and military value. For the long term, compatibility of ICBM programs with the need for flexibility and innovation in responding to possible Soviet actions would be of great importance. Economic cost would be considered carefully. The Commission would not insist on seeking a single solution to all the problems—near-term and long-term—with which the ICBM force must cope. Finally, and of great importance, our ICBM programs should support pursuit of a stable regime of arms control agreements.

The Commission has concluded that the preferred approach for modernizing our ICBM force seems to have three components: initiating engineering design of a single-warhead small ICBM, to reduce target value and permit flexibility in basing for better long-term survivability; seeking arms control agreements designed to enhance strategic stability; and deploying MX missiles in existing silos now to satisfy the immediate needs of our ICBM force and to aid that transition.

A more stable structure of ICBM deployments would exist if both sides moved toward more survivable methods of basing than is possible when there is primary dependence on large launchers and missiles. Thus from the point of view of enhancing such stability, the Commission believes that there is considerable merit in moving toward an ICBM force structure in which potential targets are of comparatively low value—missiles containing only one warhead. A single-warhead ICBM, suitably based, inherently denies an attacker the opportunity to destroy more than one warhead with one attacking warhead. The need to have basing flexibility, and particularly the need to keep open the option for different types of mobile basing, also suggests a missile of small size. If force survivability can be additionally increased by arms control agreements which lead both sides toward more survivable modes of basing than is possible with large launchers and missiles, the increase in stability would be further enhanced.

In the meantime, however, deployment of MX is essential in order to remove the Soviet advantage in ICBM capability and to help deter the threat of conventional or limited nuclear attacks on the alliance. Such deployment is also necessary to encourage the Soviets to move toward the more stable regime of deployments and arms control outlined above.

The Commission stresses that these two aspects of ICBM modernization and this approach toward arms control are integrally related. They point toward the same objective—permitting the U.S. and encouraging the Soviets to move toward more stable ICBM deployments over time in a way that is consistent with arms control agreements having the objective of reducing the risk of war. The Commission is unanimous that no one part of the proposed program can accomplish this alone.

1. ICBM Long-term Survivability: Toward the Small, Single-Warhead ICBM

The Commission believes that a single-warhead missile weighing about fifteen tons (rather than the nearly 100 tons of MX) may offer greater flexibility in the long-run effort to obtain an ICBM force that is highly survivable, even when viewed in isolation, and that can consequently serve as a hedge against potential threats to the submarine force.

The Commission thus recommends beginning engineering design of such an ICBM, leading to the initiation of full-scale development in 1987 and an initial operating capability in the early 1990s. The design of such a missile, hardened against nuclear effects, can be achieved with current technology. It should have sufficient accuracy and yield to put Soviet hardened military targets at risk. During that period an approach toward arms control, consistent with such deployments, should also seek to encourage the Soviets to move toward a more stable ICBM force structure at levels which would obviate the need to deploy very large numbers of such missiles. The development effort for such a missile need not and should not be burdened with the uncertainties accompanying a crash program; thus its timing can be such that competitive development is feasible.

Decisions about such a small missile and its basing will be influenced by several potential developments: the evolution of Soviet strategic programs, the path of arms control negotiations and agreements, general trends in technology, the cost of the program, operational considerations, and the results of our own research on specific basing modes. Although the small missile program should be pursued vigorously, the way these uncertainties are resolved will inevitably influence the size and nature of the pro-

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gram. We should keep in mind, however, that having several different modes of deployment may serve our objective of stability. The objective for the United States should be to have an overall program that will so confound, complicate, and frustrate the efforts of Soviet strategic war planners that, even in moments of stress, they could not believe that they could attack our ICBM forces effectively.

Different ICBM deployment modes by the U.S. would require different types of planned Soviet attacks. Deployment in hardened silos would require the Soviets to plan to use warheads that are large, accurate, or both. Moreover, for those silos or shelters holding a missile with only one warhead, each would present a far less attractive target than would be the case for a silo containing a large missile with many MIRVs. Mobile deployments of U.S. missiles would require the Soviets to try to barrage large areas using a number of warheads for each of our warheads at risk, to develop very sophisticated intelligence systems, or both. In this context, deployment of a small single-warhead ICBM in hardened mobile launchers is of particular interest because it could permit deployment in peacetime in limited areas such as military reservations. Land-mobile deployments without hard launchers could be threatened by a relatively small attack—in the absence of an appropriate arms control agreement—unless our own missiles were distributed widely across the country in peacetime. The key advantages of a small single-warhead missile are that it would reduce the value of each strategic target and that it is also compatible with either fixed or mobile deployments, or with combinations of the two.

As discussed below (Section VI), deployment of such small missiles would be compatible with arms control agreements reducing the number of warheads, in which case only a small number of such missiles would probably need to be deployed. If the Soviets proved unwilling to reach such agreements, however, the U.S. could deploy whatever number of small missiles were required—in whatever mix of basing modes—to maintain an adequate overall deterrent.

2. Immediate ICBM Modernization: Limited Deployment of the MX Missile

a. The MX in Minuteman Silos

There are important needs on several grounds for ICBM modernization that cannot be met by the small, single-warhead ICBM.

First, arms control negotiations—in particular the Soviets' willingness to enter agreements that will enhance stability—are heavily influenced by ongoing programs. The ABM Treaty of 1972, for example, came about only because the United States maintained an ongoing ABM program and indeed made a decision to make a limited deployment. It is illusory to believe that we could obtain a satisfactory agreement with the Soviets limiting ICBM deployments if we unilaterally terminated the only new U.S. ICBM program that could lead to deployment in this decade. Such a termination would effectively communicate to the Soviet that we were unable to neutralize their advantage in multiple-warhead ICBMs. Abandoning the MX at this time in search of a substitute would jeopardize, not enhance, the likelihood of reaching a stabilizing and equitable agreement. It would also undermine the incentives to the Soviets to change the nature of their own ICBM force and thus the environment most conducive to the deployment of a small missile.

Second, effective deterrence is in no small measure a question of the Soviets' perception of our national will and cohesion. Cancelling the MX, when it is ready for flight testing, when over $5 billion have already been spent on it, and when its importance has been stressed by the last four Presidents, does not communicate to the Soviets that we have the will essential to effective deterrence. Quite the opposite.

Third, the serious imbalance between the Soviets' massive ability to destroy hardened land-based military targets with their ballistic missile force and our lack of such a capability must be redressed promptly. Our ability to assure our allies that we have the capability and will to stand with them, with whatever forces are necessary, if the

alliance is threatened by massive conventional, chemical or biological, or limited nuclear attack is in question as long as this imbalance exists. Even before the Soviet leaders, in a grave crisis, considered using the first tank regiment or the first SS-20 missile against NATO, they must be required to face what war would mean to them. In order to augment what we would hope would be an inherent sense of conservatism and caution on their part, we must have a credible capability for controlled, prompt, limited attack on hard targets ourselves. This capability casts a shadow over the calculus of Soviet risk-taking at any level of confrontation with the West. Consequently, in the interest of the alliance as a whole, we cannot safely permit a situation to continue wherein the Soviets have the capability promptly to destroy a range of hardened military targets and we do not.

Fourth, our current ICBM force is aging significantly. The Titan II force is being retired for this reason and extensive Minuteman rehabilitation programs are planned to keep those missiles operational.

The existence of a production program for an ICBM of approximately 100 tons[1] is important for two additional reasons. As Soviet ABM modernization and modern surface-to-air missile development and deployment proceed—even within the limitations of the ABM treaty—it is important to be able to match any possible Soviet breakout from that treaty with strategic forces that have the throw-weight to carry sufficient numbers of decoys and other penetration aids; these may be necessary in order to penetrate the Soviet defenses which such a breakout could provide before other compensating steps could be taken. Having in production a missile that could effectively counter such a Soviet step should help deter them from taking it. Moreover, in view of our coming sole reliance on space shuttle orbiters, it would be prudent to have in production a booster, such as MX, that is of sufficient size to place in orbit at least some of our most strategically important satellites.

These objectives can all be accomplished, at reasonable cost, by deploying MX missiles in current Minuteman silos.

In the judgment of the Commission, the vulnerability of such silos in the near term, viewed in isolation, is not a sufficiently dominant part of the overall problem of ICBM modernization to warrant other immediate steps being taken such as closely-spacing new silos or ABM defense of those silos. This is because of the mutual survivability shared by the ICBM force and the bomber force in view of the different types of attacks that would need to be launched at each, as explained above (Section IV.A.). In any circumstances other than that of a particular kind of massive surprise attack[2] on the U.S. by the Soviet Union, Soviet planners would have to account for the possibility that MX missiles in Minuteman silos would be available for use, and thus they would help deter such attacks. To deter such surprise attacks we can reasonably rely both on our other strategic forces and on the range of operational uncertainties that the Soviets would have to consider in planning such aggression—as long as we have underway a program for long-term ICBM survivability such as that for the small, single warhead ICBM to hedge against long-term vulnerability for the rest of our forces.

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[1] *MX weights 195,000 pounds. Thus it is a "light ICBM" under the terminology of SALT II, approximately the same size as the 330 newly-deployed Soviet SS-19 ICBMs. The MX is well under half the dimensions of the much larger 308 newly-deployed SS-18s; the latter are designated as "modern heavy ICBMs" under SALT II.*

[2] *An attack in which thousands of warheads were targeted at our ICBM fields but there were no early detonations on our bomber bases from attacks by Soviet submarines.*

None of the short-term needs for ICBM force modernization set forth above would be met by deploying any missile other than the MX.

The Commission examined the concept of a common missile to serve the function of both the Trident II (D-5) missile, now under development for the Trident submarine, and of MX. At this point such a common missile would essentially be a modified Trident II. But deployment of that missile as an ICBM would not only lag several years behind the MX, its payload at the full ICBM range would be reduced. Since a larger number of Trident II missiles would need to be deployed in order to have the same number of warheads as the MX force, there would be no cost savings.

The Commission also assessed the possibility of improving the guidance on the Minuteman ICBM to the level of accuracy being developed for the MX. Such a step, however, would take some two to three years longer than production of the MX and would not redress the perceived imbalance between U.S. and Soviet capabilities. The wisdom of placing new guidance systems on the front ends of aging 1960s-era missiles is highly questionable. Moreover, shifting to such a program at this point would not provide the increased throw-weight needed to hedge either against Soviet ABM improvements or against the need to launch satellites in an emergency. Most importantly, a Minuteman modification program would not provide the incentive to the Soviets to negotiate that would be provided by production of the MX.

A program of deploying on the order of 100 MX missiles in existing Minuteman silos would, on the other hand, accomplish the objectives set forth in this section and it would do so without threatening stability. The throw-weight and megatonnage carried by the 100 MX missiles is about the same as that of the 54 large Titan missiles now being retired plus that of the 100 Minuteman III missiles that the MXs would replace. Such a deployment would thus represent a replacement and modernization of part of our ICBM force. It would provide a means of controlled limited attack on hardened targets but not a sufficient number of warheads to be able to attack all hardened Soviet ICBMs, much less all of the many command posts and other hardened military targets in the Soviet Union. Thus it would not match the overall capability of the recent Soviet deployment of over 600 modern ICBMs of MX size or larger. But a large deployment of several hundred MX missiles should be unnecessary for the limited but very important purposes set forth above. Should the Soviets refuse to engage in stabilizing arms control and engage instead in major new deployments, reconsideration of this and other conclusions would be necessary.

b. Other Possible MX Basing Modes

The Commission assessed several basing modes for the MX missile as a way of solving the problem of long-term ICBM survivability.

Deploying the MX missile in Multiple Protective Shelters (MPS) meets the need of long-term survivability reasonably well. It would have a similar advantage to the deployment of small, single-warhead missiles in silos or shelters—namely it would force an attacker to plan to deal with a multiplicity of targets. It would not, however, have the advantages of the missile's being able to move, in the event of an attack, outside its basing complex—a capability that is potentially available in some types of small missile deployments. The basing complex required for MPS necessarily affects a land area sufficiently large that local political opposition to it has been significant. There is also a possibility that, over the long run, even if the SALT II Agreement were ratified, a Soviet abrogation or refusal to renew the limits on ICBM launchers or on the number of warheads per missile contained therein could create difficulties for MPS basing. It could lead to the need either to add shelters (and not clearly at a lower cost than the Soviets' cost of adding warheads) or the need to defend the MPS basing complex with an ABM deployment in excess of that permitted under the ABM treaty.

Another alternative MX deployment that has some attractiveness for long-run survivability is closely-spaced basing (CSB). Such a deployment—e.g. 100 missiles in 100 new closely-spaced silos—would sharply reduce the land area required by the MPS system and could cause significant difficulties for some types of planned Soviet attacks by forcing the attacker to take account of the circumstances under which one of his attacking warheads would destroy others ("fratricide"). This basing scheme would require newly-developed techniques for hardening silos in order to avoid the possibility that one attacking warhead could destroy more than one silo. It would also, by its close spacing, make several potential types of ABM defense of the ICBM deployment more feasible. Some of these ABM defenses, countering some potential types of Soviet attacks, could be deployed within the numerical limits of the 1972 ABM treaty, but other more generally effective ones could not. The effectiveness of a CSB deployment in preserving the survivability of the ICBM force over the long run would depend significantly upon advances in hardening silos; the effectiveness of this is yet to be demonstrated and the cost is as yet uncertain. It also would depend upon fratricide effects that are not fully understood.

These uncertainties would not be eliminated by adding multiple hardened shelters for each missile to a CSB deployment to permit deceptive basing—a combination of MPS and CSB. Beginning a hardened shelter deployment immediately would be a concurrent program, involving a commitment to construction before new hardening techniques are fully understood or developed. In addition, although a greater number of shelters could improve survivability, constructing a number of very hard shelters would be expensive. Each shelter would be considerably more costly than the shelters in the original MPS system. Since more shelters would be needed than in the original CSB proposal, the total program would also be more costly than CSB basing.

Other basing modes for a large missile involve longer delays than those for MPS or CSB deployment (or a hybrid of the two). Thus, the improvement in survivability that might be offered by, for example, basing MX in continuous patrol aircraft or in deep underground deployments—given the time it would now require to design and develop these basing modes—would not permit deployment in this decade. Moreover, the large size of the MX missile could complicate these and other longer-term deployments.

c. Research and Development Work on ICBM Basing

The Commission recognizes that a series of phased decisions involving both the Executive branch and the Congress will be necessary in order to determine the future shape of our ICBM force. Not all decisions can or should be made in 1983. The Commission believes, however, that it is important to pursue the following research and development programs now in order to allow the U.S. government to make intelligent future decisions about ICBM basing.

The Commission believes that the work done to date (much of it in connection with designing CSB) is impressive on the technology for dramatic improvements in hardening ICBM silos or shelters. It thus recommends that vigorous research should proceed on new techniques for hardening silos and shelters generally. A specific program to resolve the uncertainties regarding hardness should be undertaken under the leadership of the Defense Nuclear Agency, and with the cooperation of the Air Force and of those Department of Energy laboratories with expertise in the relevant technology. In the event that such hardening proves sufficiently effective and affordable it may later prove useful for some or all of the silos containing MX to be hardened appropriately. In any case, such hardening techniques could prove useful for small missile deployments in the 1990s. Research on the circumstances in which there could be mutual destruction of one attacking warhead by another (fratricide) should be continued.

Vigorous investigation should proceed on different types of land-based vehicles and

launchers, including hardened vehicles, for mobile deployment of small ICBMs. Depending on the hardening level achievable for such mobile launchers, it may be possible, for example, to obtain adequate survivability by deploying small ICBMs on military facilities in vehicles alone or in vehicles in simple shelters, with the added advantages of wider mobility if there is warning of an attack. This would avoid the need to disperse the missiles beyond such areas in normal peacetime conditions. For the longer run, other types of mobile basing should also be explored.

The above ICBM programs should contribute to stability and point toward—and be compatible with—a responsible set of arms control principles that can be sustained over the years during negotiations and new agreements.

F. Summary of Modernization Recommendations

1. Strategic Forces other than ICBMs

a. As first priority, vigorous programs should continue to improve the ability of the President to command, control, and communicate with the strategic forces under conditions of severe stress or actual attack

b. The Trident submarine construction program and the Trident II (D-5) ballistic missile development program should continue with high priority; the work recommended on small submarines to avoid technological surprise in anti-submarine warfare should begin now.

c. No changes are recommended in the bomber and air-launched cruise missile programs.

d. Vigorous research and technology development on ABM should be pursued. The development of decoys and other penetration aids for our ballistic missiles is also recommended.

2. ICBM Programs

a. Engineering design should be initiated, now, of a single-warhead ICBM weighing about fifteen tons; this program should lead to the initiation of full-scale development in 1987 and an initial operating capability in the early 1990s. Deploying such a missile in more than one mode would serve stability. Hardened silos or shelters and hardened mobile launchers should be investigated now.

b. One hundred MX missiles should be deployed promptly in existing Minuteman silos as a replacement for those 100 Minutemen and the Titan II ICBMs now being decommissioned and as a modernization of the force.

c. A specific program to resolve the uncertainties regarding silo or shelter hardness should be undertaken, leading to later decisions about hardening MX in silos and deploying a small single-warhead ICBM in hardened silos or shelters. Vigorous investigation should proceed on different types of land-based vehicles and launchers, including particularly hardened vehicles.

d. Costs

The long-term costs of major programs are necessarily subject to uncertainty. Moreover, the standard of comparison is not clear in this case because, in order to compare costs, one should assess programs of equal effectiveness. Effectiveness of various types of ICBM deployments, especially with regard to long-term survivability, is precisely the issue which is most in controversy. For comparative purposes, the Commission has considered only evolutionary expansions of CSB basing of MX under which there would be some effort, in light of possible Soviet reactions, to preserve long-term ICBM force survivability.

The Commission compared the costs of the program that it recommends to the current program and to other possible strategic programs over the years of the Department of Defense's Five Year Defense Program (FY 1984-88).

The comparison, displayed in the following table, shows that the recommended program is about $1 billion per year less than the CSB program for each of the next four years, and that the total net savings during the five-year period is about $3 billion.

There will be significant costs incurred by the Commission's recommended program beyond these five years, but the exact amount would depend heavily on: the type of basing modes chosen for the small, single-warhead ICBM; the number of U.S. ICBMs deployed; whether the silos in which MX missiles are deployed are hardened, and to what degree; the evolution of the Soviet threat; and the terms of any arms control agreement at that time. For those programs which the Commission considered as reasonable alternatives, such as the further evolution of ABM defenses or multiple shelters for CSB of MX, there would similarly be significant additional costs beyond the five-year period; the magnitude of these would be affected by similar uncertainties.

Costs in Billions of Fiscal Year 1982 Dollars[1]

Alternatives:	1984	1985	1986	1987	1988	Total 5-Year
100 MX in CSB (current program)	5.6	6.0	4.9	4.1	2.3	22.9
100 MX in CSB/MPS (300 shelters)	5.6	6.0	4.9	4.1	2.3	22.9[2]
100 MX in CSB/MPS, with treaty-limited ABM defense, for initial operating capability in 1993	5.9	6.5	5.7	5.6	4.2	27.9[2]
Commission recommendations:						
100 MX in Minuteman Silos	3.9	4.1	3.0	2.2	1.4	14.6
Development of small, single-warhead ICBM and basing R&D, for initial operating capability in 1993	0.5	0.5	0.5	1.0	2.8	5.3[2]
Total	**4.4**	**4.6**	**3.5**	**3.2**	**4.2**	**19.9**

[1] *Constant FY 1982 dollars are used in this comparison, since these were the units used in December 1982 to present CSB costs to the Congress. Using either constant dollars of a later fiscal year or "then-year" dollars would show higher numbers for all alternatives. Figures were provided by the Department of Defense. FY 1983 costs are not included.*

[2] *All involve significant costs beyond the five-year period.*

VI. Arms Control.

It is a legitimate, ambitious, and realistic objective of arms control agreements to channel the modernization of strategic forces, over the long term, in more stable directions than would be the case without such agreements. Such stability supports deterrence by making aggression less likely and by reducing the risk of war by accident or miscalculation. The strategic modernization program recommended herein and the arms control considerations contained in this report are consistent with an important aspect of such stability. In light of the developments in technology set forth at in Section IV.B.

above, they seek to enhance survivability by moving both sides, in the long term, toward strategic deployments in which individual targets are of lower value. The recommended strategic program thus proposes an evolution for the U.S. ICBM force in which a given number of ballistic missile warheads would, over time, be spread over a larger number of launchers than would otherwise be the case.

This evolution is important for long-term strategic stability, but it is not without its costs. Spreading a given number of ICBM warheads, whatever the number, over greater numbers of ICBM launchers would normally mean added operating costs, for example. But in the judgment of the Commission, permitting our forces to evolve in this direction and encouraging the Soviets to do likewise is worth such costs. Moreover, if such programs can lead to mutually agreed lower levels of warhead deployments in time, then ultimately the net cost may be less.

Such an evolution marks a sound principle to guide our own long-term strategic force modernization and arms control proposals, but it is neither necessary nor wise to move precipitously in that direction. In part this is because time is required to develop such new systems properly, in part it is because continued efforts on our current strategic programs are needed to encourage the Soviets to move in a stabilizing direction. Absent such encouragement there is no realistic hope that the Soviets will join such an evolution and forego the current advantages they have in the ability to attack hard targets and to barrage large areas with their preponderance in throw-weight.

Over the long run, stability would be fostered by a dual approach toward arms control and ICBM deployments which moves toward encouraging small, single-warhead ICBMs. This requires that arms control limitations and reductions be couched, not in terms of launchers, but in terms of equal levels of warheads of roughly equivalent yield. Such an approach could permit relatively simple agreements, using appropriate counting rules, that exert pressure to reduce the overall number and destructive power of nuclear weapons and at the same time give each side an incentive to move toward more stable and less vulnerable deployments.

Arms control agreements of this sort—simple and flexible enough to permit stabilizing development and modernization programs, while imposing quantitative limits and reductions—can make an important contribution to the stability of the strategic balance. An agreement that permitted modernization of forces and also provided an incentive to reduce while modernizing, in ways that would enhance stability, would be highly desirable. It would have the considerable benefit of capping both sides' strategic forces at levels that would be considerably lower than they would otherwise reach over time. It would also recognize, realistically, that each side will naturally desire to configure its own strategic forces. Simple aggregate limits of this sort are likely to be more practical, stabilizing, and lasting than elaborate, detailed limitations on force structure and modernization whose ultimate consequences cannot be confidently anticipated.

Encouraging stability by giving incentives to move toward less vulnerable deployments is more important than reducing quickly the absolute number of warheads deployed. Reductions in warhead numbers, while desirable for long-term reasons of limiting the cost of strategic systems, should not be undertaken at the expense of influencing the characteristics of strategic deployments. For example, warhead reductions, while desirable, should not be proposed or undertaken at a rate that leads us to limit the number of launching platforms to such low levels that their survivability is made more questionable.

For a variety of historical, technical, and verification reasons, both the SALT II unratified treaty and the current START proposal contain proposals to limit or reduce the number of ICBM launchers or missiles. Unfortunately this has helped produce the tendency to identify arms control with launcher or missile limits, and to lead some to identify successful arms control with low or reduced launcher or missile limits. This

has, in turn, led to an incentive to build launchers and missiles as large as possible and to put as many warheads as possible into each missile. Such an incentive has been augmented by the cost savings involved in putting a given number of warheads on a few large missiles rather than on a number of smaller ones. Although reasonable efforts have been made to constrain warheads through arms control (e.g. by the payloadfractionation limits in the negotiated SALT II treaty), these types of limits have still not produced an incentive mutually to move away from large land-based missiles. They will not do so as long as launcher or missile limitations are seen, in and of themselves, as primary arms control objectives.

We will have for some time strategic forces in which the number of launchers on one side are outnumbered many times over by the number of warheads on the other. Under such circumstances, it is not stabilizing to use arms control to require mutual reductions in the number of launching platforms (e.g. submarines or ICBM launchers) or missiles. Such a requirement further increases the ratio of warheads to targets. It does not promote deterrence and reduce the risk of war for the Soviets to have many more times the number of accurate warheads capable of destroying hard targets than the U.S. has ICBM launchers.

In time we should try to promote an evolution toward forces in which—with an equal number of warheads—each side is encouraged to see to the survivability of its own forces in a way that does not threaten the other. But if the Soviet Union chooses to retain a large force of large missiles, each with many warheads, the U.S. must be free to match this by the sort of deployment it chooses. Any arms control agreement equating SS-18s and small single-warhead ICBMs because each is one missile or because each is on one launcher would be destabilizing in the extreme.

The approach toward arms control suggested by the Commission, moreover, is compatible with the basic objectives and direction of several other current arms control proposals.

For example, the negotiated SALT II treaty indirectly limited warheads by its limits on launchers and on the fractionation of payloads. It also barred deployments of new large ICBMs or the construction of additional fixed launchers. And it pointed toward further reductions in a follow-on SALT III agreement. These broad purposes of SALT II are wholly compatible with the arms control approach suggested here.

However, it should be noted that, as a method of restricting ICBM modernization, the negotiated SALT II Treaty, which would have expired in 1985, would have prohibited testing of more than one new ICBM. The two-part ICBM modernization program suggested by the Commission would not violate that negotiated agreement because testing of a small, single-warhead ICBM could not begin before this expiration date. Of more long-term importance, however, the approach toward arms control and force modernization suggested here is fundamentally compatible with the sort of stability that SALT II sought to achieve. SALT II specificaly contemplated the negotiation of extension agrements with improved terms, and there is no reason to doubt that future extension agreements would have allowed the testing and deployment of a second new ICBM missile with the stabilizing potential of a small, single-warhead ICBM. Moreover, the Soviets have tested two new ICBMs since October 1982.

The current Administration's START proposal is centered on warhead limitations and reductions, with some attention to throw-weight limitations. These are consistent with the Commission's recommended program. It also contains a proposed limit on launchers that the Commission believes should be reassessed since it is not compatible with a desirable evolution toward small, single-warhead ICBMs.

Some current arms control proposals in Congress concentrate on warhead limitations in which reductions are forced in warhead numbers as a price of modernization; others seek explicitly to encourage movement toward small, single-warhead ICBMs on both sides. These general directions are also consistent with the approach suggested in this report.

The Commission urges the continuation of vigorous pursuit of arms control; it is beyond the scope of this report, however, for the Commission to recommend specific arms control proposals, the size of numerical limits, or the pace and scope of reductions. Of course any arms control proposal must be carefully designed with a view to compliance and verification—often particularly difficult questions in agreements with the Soviets. Some proposals may require innovation in verification techniques.

* * * * * *

Finally, the Commission is particularly mindful of the importance of achieving a greater degree of national consensus with respect to our strategic deployments and arms control. For the last decade, each successive Administration has made proposals for arms control of strategic offensive systems that have become embroiled in political controversy between the Executive branch and Congress and between political parties. None has produced a ratified treaty covering such systems or a politically sustainable strategic modernization program for the U.S. ICBM force. Such a performance, as a nation, has produced neither agreement among ourselves, restraint by the Soviets, nor lasting mutual limitations on strategic offensive weapons.

The Commission realizes that its recommendations will probably not fully satisfy any one of the many contending groups and individuals, inside and outside government, that have staked out claims to particular approaches to strategic modernization or arms control—much less all of them. In the interest of producing a national consensus on these two large issues, however, the Commission has developed an approach that is different in kind from what has gone before.

The Commission believes that all of the difficult issues discussed in this report—including the devastating nature of modern war and the totalitarian and expansive character of the Soviet system—must be considered fairly in trying to reach a national consensus about a broad approach to strategic force modernization and arms control that can set a general direction for a number of years. Clearly there will be, and should be, many different views about specific elements in that approach. But the Commission unanimously believes that such a new consensus—requiring a spirit of compromise by all of us—is essential if we are to move toward greater stability and toward reducing the risk of war. If we can begin to see ourselves, in dealing with these issues, not as political partisans or as crusaders for one specific solution to a part of this complex set of problems, but rather as citizens of a great nation with the humbling obligation to persevere in the long-run task of preserving both peace and liberty for the world, a common perspective may finally be found.

GLOSSARY

(NOTE: These explanations of some technical terms used in strategic analysis are provided for quick reference and they do not have legal or official standing.)

Anti-Ballistic Missile (ABM) - See Ballistic Missile Defense.

Arms Control - The process of limiting or reducing arms to lessen the risk of conflict and to reduce the consequences of a conflict should it occur. The purpose of arms control is to increase security.

Ballistic Missile - A missile whose propulsion system consists of rockets which burn early

in the flight of the missile. After the rockets burn out, the payload coasts on to the target on a "ballistic trajectory" like a bullet fired from a rifle.

Ballistic Missile Defense (BMD) - A defensive system which destroys incoming ballistic missiles or their warheads. Up to this time, the greatest amount of work has been done on BMD approaches which use interceptor missiles armed with small nuclear warheads. The Soviets actually have such a system deployed in limited numbers around Moscow. BMD developments in the future could center around very different concepts such as non-nuclear homing warheads or lasers. The term "Anti-Ballistic Missile System" or "ABM" is often used interchangeably.

Command, Control, and Communications (C^3) - The complete set of hardware, people, and procedures used by the national leadership and commanders at all levels to direct and monitor the operation of military forces in the conduct of their day-to-day activities and wartime missions.

Cruise Missiles - Small, unmanned airplanes carrying nuclear or high explosive warheads. They can be launched from airplanes, trucks, ships, or submarines.

Deterrence - A condition in which a strategic power is dissuaded from attack because he believes the potential victim could retaliate effectively.

Fractionation - Replacing the warheads on a MIRV missile (See Multiple Independent Reentry Vehicle) with a larger number of smaller warheads.

Guidance - The equipment on board a missile (or other piece of moving equipment) which measures the position, speed, and direction and directs the missile toward its desired destination. Two types of guidance equipment of particular relevance to this report are:

Inertial Guidance, in which gyroscopes and other instruments guide the missile without any communication between missile and ground in either direction after the moment of launch. Inertial guidance is in virtually universal use on ICBMs and SLBMs at this time.

Terminal Guidance, in which the missile or its reentry vehicle "looks" at the ground near the target and homes in. Terminal guidance is used on cruise missiles and the Pershing II medium- range missile, but its application to long-range ballistic missiles will be a challenging problem.

Hardness - The resistance of a possible target to the effects of enemy nuclear weapons. The often-discussed hardness of missile silos is usually measured in pounds-per-square-inch (psi) of blast pressure.

Intercontinental Ballistic Missile (ICBM) - A long-range missile based on the continental United States which has sufficient range to attack most or all of the Soviet Union, or a Soviet missile with corresponding capability. See also Submarine-Launched Ballistic Missile (SLBM).

Launcher - The equipment required to launch a missile. ICBM launchers can be either fixed or mobile.

Launch on Warning - This phrase is now usually, but not universally, used to mean launch of missiles after one side received electrical signals from radars, infra-red satellites,

or other sensors that enemy missiles are on the way, but before there have been nuclear detonations on its territory. "Launch under attack" is sometimes used interchangeably with "launch on warning" and sometimes used to designate a launch after more confirmation has been received, such as indications that detonations have occurred.

Launch Under Attack - See "Launch on Warning."

Multiple Independent Reentry Vehicle (MIRV) System - A missile capable of carrying two or more reentry vehicles which can be directed individually toward separate targets. The targets for a single missile can be spread over a wide area which is often called the "footprint" of the missile, depending on the range to which the missile is targeted. The SALT II agreement limits the number of reentry vehicles on ICBMs to ten.

Payload - The total weight of the reentry vehicles carried by a single missile. See also throw-weight.

Penetration Aids - Equipment, such as decoys, carried along as part of a missile's throw-weight, specifically to assist the reentry vehicle to get through ballistic missile defenses.

PBV - Post Boost Vehicle (often called "bus") - the section of a MIRV ballistic missile which fits between the main rocket stages and the reentry vehicles. It carries the reentry vehicles and directs each one toward its individual target.

Reentry Vehicle (RV) - The shell around a warhead, generally in the shape of a cone or modified cone, which protects the missile warhead during its reentry through the earth's atmosphere. When the weight of a reentry vehicle is discussed, it usually means the total weight of the warhead, protective shell, and any other equipment carried inside that shell.

Stability - The condition which exists when no strategic power believes it can significantly improve its situation by attacking first in a crisis or when it does not feel compelled to launch its strategic weapons in order to avoid losing them.

Submarine-Launched Ballistic Missile (SLBM) - A ballistic missile launched from a nuclear submarine. While they fundamentally operate in a similar manner, in practice ICBMs and SLBMs have many features that are different in important ways because of the different engineering problems in land and sea basing. Until the advent of our new Trident SLBM system (and a roughly similar Soviet system), SLBMs also had substantially shorter ranges than ICBMs.

Throw-weight - The useful weight which a ballistic missile can place on a trajectory toward its target by the boost or main propulsion stages of the missile. It includes such items as reentry vehicles, post-boost vehicles or similar targeting devices, and penetration aids and their release devices.

Triad - A shorthand expression often used to express the concept that the U.S. has three separate, and in some ways roughly equal, types of strategic nuclear forces—land-based ICBMs, sea-based SLBMs, and bombers.

Verification - The total process of determining compliance with treaty obligations in the context of safeguarding national security. The word "monitoring" is often used to mean the technical process of determining, for example, how many ICBM silos the Soviets have built.

Warhead - The part of a missile system that explodes and causes damage to the target.

Warning - Indications from any of a wide variety of sources that another nation intends to start hostilities. The term "strategic warning" is often used to mean indications hours or days in advance that attack is definitely planned, while "tactical warning" means evidence (usually from radar or other electronic systems) that enemy warheads are actually on the way and will arrive in a matter of minutes. Military historians have pointed out many instances, including Pearl Harbor, when a nation had strategic warning but for a variety of reasons failed to take appropriate action.

PROGRAM FOR INTEGRATION OF FORCES

General SCOWCROFT. Thank you, Mr. Chairman.

As we reviewed the troubled history of the MX program, we came to the conclusion that we may be at the end of an era in several respects: The watershed position, that our focus could not be as narrow as we perhaps had originally thought and that what was needed was a fundamentally new departure. Our recommendations represents that new departure, which is fundamentally to try to integrate our strategic force development programs and our arms control programs and move both in the direction of enhanced stability. We would accomplish this through a three-part program, a closely integrated program, which we think is a single package.

DEPLOYMENT OF MX MISSILES

The first part of that program would be the immediate deployment of something like 100 MX missiles. We recommend this for a number of reasons, principal among which are the following:

First, to demonstrate national will and cohesion. We have now had four Presidents who have stated that the MX is important, if not essential, to our national security. Failure to come through on this program by the United States would hardly demonstrate to the Soviet Union that we have that essential ingredient of a coherent deterrence, that is, national will, to do whatever is required to maintain deterrence.

Next, we feel the MX deployment is essential to reduce the imbalance in ICBM forces between the United States and the Soviet Union. The Soviets can with their ICBM forces put our own forces and other critical targets at risk in a way that the United States cannot begin to match. This we feel is an important element of instability, both to perception, and, consequently, with respect to crisis stability.

And very important, we believe the MX is essential in order to induce the Soviets toward negotiations, especially negotiations on arms control, on an arms control framework which would permit us and which would encourage them to move in the direction of greater stability, thus making possible the optimum implementation of the other elements of our program.

The second element of that program is for the longer run and for survivability. The Commission proposes the engineering design of a small single-warhead missile, looking toward deployment in probably the early 1990's. We suggest a single-warhead missile in order to reduce the value of the target, making it unremunerative, in military terms, to attack and thus enhancing the stability of our strategic force. We think this missile should be small in order to open up to the maximum extent possible the oppotunities for survivable basing, almost certainly to include a variety of mobile basing.

Finally, as a third part of our program, in order to provide an environment in which the deployment of this small missile would be most favorable, a new departure in arms control is needed. Counting by launchers as we have over the past decade has preversely led us to the present structure of very high value targets, large missiles, each with a number of warhead. We must, therefore, turn

to counting by warheads perhaps with some inclusion of yield and other factors, but to get away from counting by launcher. After we turn to counting by warhead, then it would be useful to cap and sharply reduce the numbers of strategic forces in order that the deployment of this small missile need not be in such numbers as would create substantial basing or more substantial cost problems.

ESSENTIAL FACTOR OF MX

That, in summary, is the program, but that gets us back to the MX again, which is, I pointed out, essential to induce the Soviets to negotiate away what is currently a favorable strategic posture for them with respect to ICBM forces. Hopefully it will, as well, encourage them to move in the same strategic direction, making it clear that their huge missiles in those silos are wasting assets. For this we believe that MX deployed in Minuteman silos is an adequate employment at reasonable cost. It is true that whatever the current survivability of those Minuteman silos, they are becoming more vulnerable. We do propose a vigorous research and development program on silo hardening, and we would, of course, take advantage of any results of that at reasonable cost. But our recommendations do not depend on successful outcome of that research.

Survivability is a complex issue. The fundamental requirement for survivability of our ICBM is as a hedge against a breakthrough in Soviet antisubmarine warfare which would put our submarines at risk. We do not see that breakthrough now or on the horizon. We cannot anticipate, however, when or if it will ever take place. Since it is out there now, we believe we do have some period of time in which to take adequate steps against that essential requirement of survivability of our land-based forces.

SILO VULNERABILITY

We believe that silo vulnerability is not an insurmountable part of our overall problem to require other immediate steps. Whatever the Soviets' feelings about the test accuracy of their missiles, they must continue to have considerable operational uncertainties about their ability in the first time, without any practice, to operate those forces with operational use and operational systems in a way which in an attack to be successful has to be perfect. In addition, for some time now and for some time in the future, we I think can rely on what I would call the synergistic survivability of our bombers and our ICBM forces. That is because the Soviets in order to attack those forces require different weapons sytems, and because they require different weapons systems they are not at present capable of attacking both of them simultaneously, and we believe perhaps for another decade we can count on that kind of mutual, interlocking survivability.

That, in sum, Mr. Chairman, is the package we propose. We do believe that it is an integral package and no single element of it is adequate by itself. It is not a perfect solution to a problem which has vexed us for a long time. We believe it does advance and provide for our national security and hopefully could provide the groundwork for a coming together on an issue which has been with us for quite some time.

Chairman HATFIELD. Thank you very much, General.

You have had a difficult assignment and I know it has not been an easy one to come to, even though I heartily disagree with your conclusion.

MX MISSILES IN EXISTING MINUTEMAN SILOS

General, the Congressional Budget Office in a report released by the House Budget Committee states that if we proceed to deploy 100 MX missiles as the Commission has recommended in existing Minuteman silos, by 1990, they would comprise only 3 percent of all the survivable U.S. hard target warheads, and by 1996 they would comprise less that 1 percent of the survivable warheads under a nuclear attack scenario. Moreover, many of our own military experts in the administration as well as outside the administration have seriously questioned the viability of placing our most sophisticated warheads in the existing silos because of their current vulnerability.

Now my question is, would you provide your view for the committee on the rationale for spending in excess of $20 billion on a system whose contribution to our national defense is so speculative?

General SCOWCROFT. Yes, Mr. Chairman.

I believe that it is essential because I do not think it likely, perhaps not even possible, to move to the force structure in the arms control program which we think is the best way to go over the longer term without a transition period in which the MX is absolutely essential. The Soviets, whatever you think about the overall strategic balance, the Soviets do now enjoy an advantage in ICBM forces in that because of the numbers, the yield of their warheads, and the accuracy, they put our own force at risk in a way we cannot reciprocate. Now you can put your own value on what that means.

Chairman HATFIELD. You are speaking of land based?

General SCOWCROFT. Solely the land-based.

OVERALL UNITED STATES-SOVIET BALANCE

Chairman HATFIELD. What about the rest of the triad as far as the overall balance between the Soviet Union and the United States?

General SCOWCROFT. I think the overall balance is not so asymmetrical as it is in this one particular force. And the reason that that is important is deterrence is a very ephemeral kind of notion. It is a perception not by us. Deterrence for us represents a perception of the Soviets as to what the balance is, what the costs, what the risks, and what the benefits are.

Chairman HATFIELD. The Soviet Union is looking at our total arsenal in this perception?

General SCOWCROFT. Absolutely. There is no question about it. But to figure out what would deter the Soviets, we have to see as best we can the kinds of things that they seem to think are important. In the land-based forces, for example, since we deployed our last ICBM, the Minuteman III, they have the SS–17, SS–18, and SS–19. That is about 650 missiles of MX size or larger, and they are

now testing one, possibly two, new missiles. Now that is important. They didn't have to do that in order to balance off in total force capability U.S. capability. They could have rested easily with, for example, the SS–17 force.

Chairman HATFIELD. But, General, isn't it also true the Soviet Union is not a historic maritime power and therefore their whole orientation has been land-based defense?

General SCOWCROFT. No question about it.

LAUNCH-ON-WARNING CAPABILITY

Chairman HATFIELD. Yesterday, Dr. Bundy and Admiral Turner made some remarks here and raised a question about the question of, the issue or policy of launch on warning capability. In fact, Dr. Bundy suggests there might be an underlying interest in the administration or in the Commission's recommendations to adopt that type of capability or that policy. Admiral Turner expressed in terms he felt that the recommendation of the Commission was a move from retaliatory doctrine to war-fighting doctrine. And we have had others from the administration who have been unwilling to discuss the potential launch on warning option in previous congressional hearings. But I am asking you now as Chairman of the Commission, would you find it desirable to put the United States in a position in which launch on warning policy would be a reasonable option under this scenario of the MX missile deployment?

General SCOWCROFT. I can speak not only for myself but for the Commission. We do not feel that a launch on warning policy is wise or acceptable for the United States. That is different from having the capability to do it. We do not believe, nor are we advocating in our recommendations anything like a launch on warning.

Chairman HATFIELD. All right, that may be your intention, but let me carry you through this scenario, General. If the Air Force is correct in its estimate that 70 percent of the entire $20 billion MX force would be destroyed before it is ever used, then by putting MX missiles in vulnerable Minuteman silos, doesn't the effectiveness decrease appreciably if you plan a launch on warning policy?

General SCOWCROFT. We believe, Mr. Chairman, that we maintain our strategic forces for deterrence. And we acknowledge that, first of all, any nuclear war is highly unlikely. The most unlikely of nuclear wars is the bolt out of the blue, a sudden attack without warning or provocation. Should such an attack nevertheless take place, we would acknowledge that we may lose the vast bulk of our ICBM forces and would rely for retaliation on our submarine forces or those of the bomber forces which we take, with the proviso the Soviets have at the present time difficulty attacking both of our forces. But we think the existence of the MX and in any other scenario arising from a massive continental war or use of some nuclear weapons in Europe or some other kind of crisis, that those weapons would be available for use and, for example, in responding to an attack by the Soviet Union on our land-based forces, the bombers and the missiles. The only way they can attack the bomber forces is with their submarine forces from close in positions. If they did that, we would have not a launch on warning, we would have a launch after we have actually seen detonations on our bomber

force. There would still be adequate time to use our ICBM forces. It seemed to us that in a deterrence sense is what is important, and the Soviet Union must take account of that.

Chairman HATFIELD. General, I may want to followup this in my next round. At the present time my time is up and I defer to Senator DeConcini.

Senator DECONCINI. Thank you, Mr. Chairman.

General, I would like to ask you a couple of questions and I may submit additional questions for the people that will be testifying.

WAR BY ESCALATING CRISIS

Although I am not sure that it is stated in so many words in the Commission report, my conclusion upon reading it is that the Commission feels that the threat of a limited nuclear war or massive conventional war involving the Soviets is sufficiently great that it is worth deploying the MX in a way that would make it vulnerable in an all out nuclear war. Is that a correct interpretation? I am having a real problem with your report, although I have been a supporter of the MX missile in the past.

General SCOWCROFT. Yes, I think what we are saying is that if a nuclear war was to develop between the United States and the Soviet Union, it would most likely develop out of some other crisis, some escalating crisis. A war in Europe is, of course, the most likely place because it is the most vital area for the United States. And our concern fundamentally is the Soviets, looking at the ICBM balance as they see it with this advantage as they see it in being able to attack our forces in a way we cannot begin to respond, will not be moved necessary to attack but to approach any crisis with the sense of relative impunity, feeling that the balance is such that the United States in a crisis will be the one that will blink or step back or whatever. And it is out of that kind of misperception that we think the true danger arises.

Senator DECONCINI. So the vulnerability was not paramount in your determination of the deployment mode?

General SCOWCROFT. We think it is not over the short terms, we think we do have some time. And over the long term, we think vulnerability is important and we would deal with it through the deployment of this small missile.

DEEMPHASIZING ISSUE OF VULNERABILITY

Senator DECONCINI. My next question, relates to the frame of mind of the Commission when it decided to deemphasize the issue of vulnerability. The MX missile was sold to the Senate, at least by the previous administration, on the basis of it not being vulnerable, that survivability was the key to recapturing the strategic imbalance that had developed. Now that we have a vulnerable depolyment mode recommended by the Commission, and your testimony this morning is helpful in explaining this recommendation, where has that great pressure gone that was so convincing to me that a nonvulnerable missile, a new generation missile, was necessary for our balance with the Soviet Union and for our national security? How did you rationalize or come to that conclusion that vulnerability was no longer a No. 1 concern? If the reason has to do with a

political reality of what is possible in Congress, I can perhaps accept that. I would just like to know.

General SCOWCROFT. That is an excellent question, Senator.

First of all, if you go right back to the initiation of the MX program, the MX concept, it was originally designed as a modernization program. The Minuteman had a design life of something like 10 years, something like that, and a modernization program was conceived. The MX has always been designed carefully to fit in the Minuteman silos. Now as Soviet accuracy increased, we became concerned about that part of it and that tended to dominate all other aspects off it. In addition, I think we have sought to kind of recreate the conditions when we deployed Minuteman III, and for its time it was a perfect weapon. It had all the accuracy required for the Soviet targets at the time. It wasn't vulnerable given Soviet weapons systems of the time. And it has integrated command and control. Like all ICBM forces, it is always ready to go. And I think we have been seeking to reconstitute that in a single weapon system deployed in a single way. We decided that at the present time that can't be done, and we looked at vulnerability again and, for the reasons I explained, we think we have sufficient time to divide the problem into its two parts, to use the MX fundamentally as the bridge between where we are now over in both arms control and in our strategic forces over this new direction that we seek to go which we think will enhance stability.

100'S MISSILE CONSIDERATION

Senator DECONCINI. Sometimes maybe we get too involved in trying to figure out or pretend we might know what the Soviet strategists are perceiving, but if you were a Soviet planner, leader/planner, wouldn't you assume a nation that had deployed its most potential nuclear weapon in an extremely vulnerable manner had adopted a launch on warning strategy? That just seems to make a lot of commonsense to me.

General SCOWCROFT. I think the Soviets have to make considerable assumptions, but one of the reasons we recommend deploying something like 100 MX's is so that we carefully are not recommending a force which would constitute what I would call a full first-strike capability.

Senator DECONCINI. Let me interrupt you there. Coming to the 100 missiles in the Commission report, did you start at a greater number than that for consideration?

General SCOWCROFT. Let me tell you how we did it.

At the upper end, and that is 200, 250, you can argue precisely what it is, you are getting to a force which would constitute a first-strike capability, in other words, adequate to take out most of the Soviet hard targets with reasonable expectation of success. At the lower end, we felt a deployment that was so small, very small, would constitute an expression of weakness rather than of confidence that we want to express by deployment. What that number is is hard to say. If you get down to 20, 30, what have you, it is not a deployment that makes any kind of military sense. We felt there was nothing magic about 100. It is sufficient to express to the Soviets our determination to do whatever is necessary and hopefully to

convince them their big missiles in their silos are wasting assets and they ought to join us in a search for strategic posture on both sides.

Senator DECONCINI. So your answer to my statement, General, if you were a Soviet strategy planner, you would not consider 100 MX's in a very vulnerable mode a launch on warning strategy from the United States?

General SCOWCROFT. No, I wouldn't. I would worry about it if I were the Soviets. It would certainly get my attention.

Senator DECONCINI. Because to me, just from this Senator's point of view the idea of a least vulnerable mode of deployment I realize there is none that would be totally invulnerable—made so much sense, and I am having a real struggle after having rejected dense pack because of vulnerability concerns and now try to understand the Commission's report, which says vulnerability isn't all that important.

General SCOWCROFT. If I could just add one thing, Senator. I think we should never give the Soviets the confidence that under no circumstances would we ever use our strategic forces first, because I think an important element in deterrence as they look at any crisis situation that might arise is to induce in them a kind of prudent behavior so by some kind of misconception we don't end up in a crisis or in a result which neither one of us seeks for itself.

Senator DECONCINI. Mr. Chairman, I may have some other questions, but I would be glad to yield at this time.

Chairman HATFIELD. Thank you, Senator.

Senator Rudman.

Senator RUDMAN. Thank you very much, Mr. Chairman.

ISSUES INVOLVED IN THE MX DEPLOYMENT

General Scowcroft, I have read the transcript of the other hearings you have attended, and you have said there are three issues involved: One which you describe generally as a demonstration to the Soviets of our national will, the second correcting the imbalance in the land-based ICBM forces, and finally what impact those two might have on the third, which is serious arms reduction talks. I want to go through those points one by one and mirror your testimony against testimony we heard yesterday from Admiral Turner and Mr. Bundy.

General Scowcroft, I don't really understand this argument about national will. As one who has supported the President's defense spending right down the line, how can the statement be made that the Soviets have some doubt of our national will when we are going to spend about $1.6 trillion on defense generally over the next 5 years, we are going forward with the B–1, with Stealth, with the new Trident, the D–5, we are going to deploy our missiles in West Germany, unless the latest Andropov proposal should be a success? How can anyone looking at the United States say we don't have the national will? What does putting 100 missiles in the West tell the Soviets about our will beyond what they know about it now?

General SCOWCROFT. I think it tells quite a bit, for several reasons. First, as I have said, the MX now has been stated by four

Presidents in very strong terms as being an essential weapon system. It has a symbolism now which is above and beyond its intrinisc merit as a weapon system, beyond that of the B–1, beyond that of the D–5. The Soviets now see rising peace movements in Europe, in the United States. They didn't cause those peace movements. The peace movement happened to be helpful to the Soviets in inducing an attitude of mind in the West which could paralyze our ability to do what would concern the Soviets and force them to negotiations. And there is no particular reason that they would want to negotiate if there is an easier way for them to enjoy the kind of strategic balance which they would like.

MX SYMBOLISM

Senator RUDMAN. Do you believe the symbol then of MX, to the Soviets is a quantum increase in the demonstration of the United States' will over what we have now?

General SCOWCROFT. For the Soviet Union, ICMB's are the coin of the realm. They are a land-based power. They do put greater stock in ICMB's than they do in bombers and SLBM's. They didn't just by accident deploy 650 new ICBM's since we deploy the Minuteman III, and they have not started now on one, possibly, two, new systems just by accident. Those are indications of the importance that they put on that area of strategic force.

Senator RUDMAN. Well, General Scowcroft, isn't one of the reasons that the Soviets put the emphasis on the land-based forces because they are within the realm of technology that they have been able to handle? The fact of the matter is that they have been unable to move with the latitude we have moved in air-launched missiles, in ground-launched cruise missiles, and certainly in submarine forces where there isn't a context. Wasn't that their choice by necessity?

General SCOWCROFT. To accomplish the kind of deterrence we always felt was adequate, they didn't need any kind of forces with the accuracy and numbers they have. That was not necessary. We held back on improving our accuracy to give it that kind of hard target kill capability for a number of years. The Soviets, as soon as they had that chance, went ahead and did it, and they are continuing to improve.

SOVIET IMPROVEMENT OF LAND-BASED FORCES

Senator RUDMAN. With their land-based forces?

General SCOWCROFT. Absolutely they are doing some with their sea-based forces. They have deployed three sea-based missiles in the time we have deployed the C–4. But I agree with you land base is where they put most of their emphasis.

Senator RUDMAN. Would that not be, General Scowcroft, because it is probably more likely, in reading their writing, they are more apt to launch a first strike and therefore their land bases are a lot less vulnerable from the point of view than our own?

General SCOWCROFT. I think that is a reasonable conclusion to come to. On the other hand, they have taken steps which have made our Minuteman force much less capable than at the time it was deployed. In modernizing their ICMB, they have rebuilt all

their silos, making it much, much harder and substantially reducing the ability of the Minuteman to attack them, and as well with their command facilities.

Senator RUDMAN. The third point, of course, is how this will affect negotiations. I have talked to a number of Soviet watchers, people in and out of government, who believe that the Soviet response to our deployment of 100 MX's will be precisely what they have done in the past, that is, to move with haste toward deploying their new MX allowed under SALT, and then in no way will this, because of the imbalance of the other two legs of the triad, convince them to negotiate in good faith. What do you say to that proposal?

General SCOWCROFT. Senator, they are already moving in that direction. What I would say is the Soviets are not philanthropists. They do not give up anything for nothing. They have faced in the past with U.S. determination to deploy certain systems come to reasonable arms control agreements. I think if you will look at the negotiating history of the ABM Treaty in 1972, you will find a sharp change in Soviet attitudes after Congress agreed to deployment of the ABM system.

PERSHING AND GLM'S AS BARGAINING CHIP

Senator RUDMAN. I think that is precisely correct. I would like to quote for you Admiral Turner's testimony yesterday, which I think most of the committee thought was remarkable. He made a point that, frankly, not too many people have talked about. He said the best bargaining chip that we have is not 100 MX's put in silos in this country, but the Pershings and ground-launched cruise missiles we are about to deploy in Europe. It was Admiral Turner's position that that bargaining chip should be switched from the intermediate nuclear weapons talks into the START talks because that more than anything has the Soviets in great fear, and obviously Mr. Andropov's statement of yesterday afternoon is illustrative of that point. Why not discuss the Pershings and ground-launched missiles in terms of the START talks rather than in terms of MX as a bargaining chip in the sense?

General SCOWCROFT. I think that gets us a little afield. I think that is something which ought to be considered. As a matter of fact, the end of last week I participated for 3 days in discussions, informal discussion groups, with the Soviet group and we covered our report and a number of other things. The kind of development that Admiral Turner proposed, that is, greater reliance on cruise missiles, is that which the Soviets would find most distasteful and most destabilizing from their standpoint.

UNITED STATES-SOVIET NUCLEAR DETERRENT CAPABILITY COMPARISON

Senator RUDMAN. My last question, general, if you were commander of their forces, or put it another way, if you were the commander of our forces, would you at this moment trade our forces for theirs? I am talking about our nuclear deterrent capability.

General SCOWCROFT. I have great faith in the United States and its capability, its technical and military people. No, I would not. But right now I would trade our ICMB forces for theirs.

Senator RUDMAN. You would?
General SCOWCROFT. Yes.

UNITED STATES-SOVIET ICBM COMPARISON

Senator RUDMAN. I am sure most people would. I have 2 minutes remaining so let's just cover that subject.

If you go back to the genesis of the whole theory of the triad, go back and read testimony and now released documents of that era, there was never a supposition that each leg of this triad had to be absolutely invulnerable. The synergism between the bomber force and missile force, would act to assure invulnerability. Am I correct?

General SCOWCROFT. Absolutely right.

SOVIET LAND-BASED FORCE

Senator RUDMAN. The Soviets decided, for which we can debate, that the best way to parity with the United States was to build a huge land-based force that would be a deterrent to this country who they really don't believe are going to launch a first strike. Is that not an accurate statement of why they did that?

General SCOWCROFT. I think that is only partly true. I think the vigor of their program in submarine forces is not much less than that in the ICBM forces. The only place they have noticably lagged is in bomber force development. They are now taking steps there. They have done it in the ICBM force. In the submarine force they are moving strongly.

VALUE OF INTEGRATED TRIAD SYSTEM

Senator RUDMAN. It just seems to me—and I am really going through a great deal of pain on this issue to decide how to cast this vote—to take the point of view we have to reach absolute parity in each area of Soviet missile deployment as an inducement, looking at the past history of the Soviets, considering the imbalance they have with us in each leg of the triad, to do even more on the land-based force, is to exacerbate the situation rather than help it.

General SCOWCROFT. Senator, we are clearly saying we are not trying to reach parity in the ICBM forces. I agree with you we have tended in the past to think each leg of the triad should be completely independent, do the job by itself. If that has been true in the past, it is no longer going to be true in the future. We do emphasize the integrated nature of triad. We are not proposing parity of all legs.

Senator RUDMAN. Thank you.
Chairman HATFIELD. Thank you, Senator.
Senator Bumpers.

DANGERS IN NOT DEPLOYING MX

Senator BUMPERS. General Scowcroft, when I first got here you were talking about the necessity of MX as a land-based missile to carry us through the transition period. What dangers would there be during the transition period if we didn't deploy the MX that we would avoid if we did deploy the MX?

General SCOWCROFT. I think that the dangers are three. First, in the geopolitical sphere, the dangers are the Soviets because of this disparity, it you will, of some sort in ICBM forces, the Soviets might feel they can act with relative impunity in a crisis, that that edge gave them sufficient bargaining room that the United States would have to be more cautious than the Soviets.

Senator BUMPERS. If I may interrupt you at that point, and I apologize for doing so. But in response to Senator Rudman's question whether you would trade our strategic posture for theirs, you said no, but you would trade our land-based missiles for theirs. That leaves the bomber force and submarine force which you would not trade. And I assume if you were to ask a Soviet strategist the same question, he would say, "I wouldn't trade our land-based force, but I would love to have the American bomber force and submarine force." Is that a fair statement?

General SCOWCROFT. Yes, it logically follows.

SOVIET REACTION TO MX DEPLOYMENT

Senator BUMPERS. If that is true, why do you think the Soviets might create some kind of mischief if we don't have the MX?

General SCOWCROFT. I am not talking about deliberately creating mischief, although I think at their propensity they are not great risk-takers. There is no question about it. But I think historically we ought to be informed more by the way World War I came about rather than World War II and the kind of misperceptions that could carry into a crisis, the kind of intrinsic feeling, "Well, we have this edge." And you are absolutely right about the bombers and submarine forces. But in terms of the Soviets' eyes and in terms of the value they seem to put on accuracy or that kind of counterforce capability, it is not the same time, because we cannot at the present time put their strategic forces at risk with our submarine forces, nor in a crisis with their bomber forces over the short run.

Senator BUMPERS. We don't get any more survivability with 100 MX's than we have right now, do we?

General SCOWCROFT. No.

Senator BUMPERS. And if we deploy the MX and then we move toward development and deployment of the Midgetman, which the Commission has recommended, then we are going to be in violation of SALT II. Isn't that correct?

General SCOWCROFT. I believe that is not correct. Let me explain. SALT II, whatever its status, even if SALT II were ratified, it would expire on December 31, 1985. As a part of the agreed understandings for SALT II, it was agreed between the two sides that they would undertake negotiations for a follow-on treaty to SALT II which would carry under into the new era. Whether it is done there or whether it is a follow-on of our START talks, whatever, we do believe that arms control will continue. We believe that the small, single-warhead missile is so obviously a stabilizing factor that to say that that would not be a prime negotiating subject for us, and we think of virtually equal interest to the Soviet Union, I think it is not—the small missile would not be ready for testing

until 1983, 1987, substantially past the time with SALT II whatever its status—we think that is really a nonissue.

MIDGETMAN DEPLOYMENT

Senator BUMPERS. General, I take exception to that and, with all due respect to you, and I have a great deal of respect for you, I found that part of the Commission's proposal a piece of sophistry that is totally unacceptable. It suggests that if we go with the Midgetman, we will not be deploying at least until the post-1987 timeframe, which would be past the time for the end of SALT II, and therefore no violation. Now if we have no START agreement—and I think that is a very distinct possibility at least during this administration—but if we do not and both sides are going to violate SALT II, haven't we opened Pandora's box?

General SCOWCROFT. Senator, first of all, if I could just continue on that line, the small missile we believe does contribute as we hope arms control will contribute.

Senator BUMPERS. Don't mistake me. I am for the Midgetman. I think that is fine. I agree with that part of the Commission's report. I am not for the MX. All I am saying is you suggest we would not be in violation simply because SALT II would have terminated by that time.

General SCOWCROFT. I believe we would not in two respects. First of all, I think it is standing arms control on its head. It would through a legalistic way prevent both sides from moving in some way arms control ought to apply. Second, we would like to have the Soviets go in the same direction. We would have to grant the Soviets a waiver to go in that direction because they have already tested and declared their new missile under SALT II. So in order to enable them to go in a direction they want to, we have to give them a waiver for it.

MIDGETMAN VS. MX DEPLOYMENT

Senator BUMPERS. Let me ask another question on the Midgetman. The Commission concluded it was in our national security interest to move toward small, single-warhead missiles because it would reduce the value of the target. So why does the Commission turn around and recommend deployment of an MX, which is a very high value target? Isn't that a contradiction?

General SCOWCROFT. It is a paradox at least, if not a contradiction. We feel, Senator, that, frankly, it probably is not possible to get from here to there without all the elements of the package, which is based on the explanations that I gave, and that to develop the arms control environment in which the small missile makes sense, in which we would not have to deploy it in the thousands, which might otherwise be required and which would raise the cost of the system very, very sharply, that we do have to have the arms control environment, and we think the MX is essential in order to get that and produce that environment.

ASW THREAT

Senator BUMPERS. There is one other thing I'd like to pursue. The Commission concluded that there would be no significant ASW threat for the foreseeable future. So why shouldn't we rely on our Trident submarines, for example, if hard target kill capability needs to be increased in the interim? Why not upgrade the remaining 250 Minuteman III's with the Mark 12–A warhead and the Advanced Inertial Reference System, the AIRS guidance system?

General SCOWCROFT. I guess fundamentally because it is our perception that the Soviets in order to give up the asymmetrical position that they have in ICBM forces and be prepared to go more toward stability, it has to be demonstrated to them that those big missiles are a wasting asset. We feel modernizing the Minuteman force does not do that.

VALUE OF D–5 AND TRIDENT SUBMARINES

Senator BUMPERS. Let me just ask you finally on the value of the D–5 and the Trident submarine and the question of invulnerability. Our submarines are the only invulnerable weapons systems we have; is that not correct?

General SCOWCROFT. It is about 50 percent invulnerable, Senator.

Senator BUMPERS. Well, 50 percent. And, incidentally, didn't we have some conflict in the Pentagon about whether our land-based ICBM's are 95 percent vulnerable or 70 percent? We have gotten mixed signals.

General SCOWCROFT. We will never know.

Senator BUMPERS. I hope we never find out.

SUBMARINE SURVIVABILITY

Just let me make a statement to you. Trident II missiles with about 200 hard target kill warheads will be deployed on 1 submarine in 1989. That is our ninth Trident in 1989. That is 200 hard target kill warheads on 1 sub. And when deployed, all 200 Trident II warheads could survive a Soviet first strike. Now when fully deployed in 1989, only 50 to 300 MX hard target kill warheads would survive a Soviet first strike. That is 5 percent to 30 percent, if we chose to ride out the attack and not launch. For about one-eighth to one-tenth the cost of the full MX deployment, assuming a 5-percent survivability, we could buy more surviving hard target kill warheads on one Trident II submarine or almost as many on one submarine, assuming a 30-percent survivability, than we could obtain if we deployed 100 MX in Minuteman silos. So MX costs 8 to 10 times as much as 1 Trident II submarine and we get fewer survivable remaining warheads. Is that a fair statement?

General SCOWCROFT. I am not impressed with the cost figures, Senator. I think we should not be content to rest our efforts until 1989, assuming, and I am very hopeful, that the Trident comes in with a kind of accuracy that would be appropriate for it. But assume that it does, it is 1983 now. I would hope that by 1989 we would be well on the way toward a new strategic posture and new system with the Soviet Union and not have to wait until they are convinced that we have in fact deployed the D–5 and we have

enough of them to do what we are proposing to do with the MX today.

Senator BUMPERS. Mr. Chairman, if I just may make one last statement in response. The Commission report, and you have reaffirmed that today, indicates to me between now and 1989—and I agree with you where we ought to be in 1989—that by deploying a hundred MX missiles in Minuteman silos between now and then, all we are doing it showing our national will. And I must say I agree with Senator Rudman. It occurs to me that with all the other strategic weapon systems we have developed and are developing we are showing plenty of national will without the MX.

Chairman HATFIELD. Thank you, Senator.

Senator Specter.

Senator SPECTER. Thank you, Mr. Chairman.

CONSIDERATION OF VARIOUS CONCEPTS

General Scowcroft, during your presentation the picture comes through to me that we are really sticking with a great many concepts which originated years ago, talking about what four Presidents have done, talking about the concept of the triad, the ring of land, sea and air, but why is there anything sacrosanct about what was done more than a decade ago in the planning in the face of very hard evidence Senator Rudman, Senator Bumpers and Senator Hatfield have summarized of what we get for $1 of investment? A submarine, as you say, is now invulnerable and the estimates are it will be invulnerable at least to the end of the century. Why put so much money into a vulnerable MX system?

General SCOWCROFT. I think, Senator, national will is only one part of it. I think we have to be attentive to the Soviet Union and their attitudes and what it takes to move them. I suggest the effect of the ABM Treaty or the effect of the ABM program, the safeguard program, to the Soviet negotiations. I think you can see the same thing in INF. We started to complain to the Soviets about SS-20 in 1977. We complained for 2 years with absolutely no effect until about 1 month before NATO made its decision to go forward to the two-track plan. It was then, and only then, that the Soviets called for negotiation. And it seems to us that it is essential, especially the way that they look at this, that they do not give up something for nothing, and that even if the political leadership had greater good will than we think, it is not easily persuadable to their military leadership that they should simply dismantle their forces, substantially change, without getting something which they think is of equal value.

WAR HEAD COUNT

Senator SPECTER. General, to the extent that they are movable, they seem to be moved by the Pershing II's and the cruise missile. We have been dancing around the MX for more than a decade. Do you place any significant reliance on what Andropov said yesterday, and if so, isn't the inducement coming from the Pershing II and cruise missile and not the war dance we are doing on the MX?

General SCOWCROFT. No, I take some encouragement from what the Secretary General said. I think that that indication of a will-

ingness to go in a direction of counting warheads is one of our strong recommendations. I think one cannot completely separate Pershing from strategic forces, but neither do I think they are identical.

Senator SPECTER. But is there anything to suggest what Andropov has said is in any way related to the MX? If there is any signal from the MX, it is that it is changing, we are indecisive. So is there anything to suggest what Andropov is doing relates to the MX plan?

General SCOWCROFT. No, I think that is true. That the Soviets do consider our INF force a serious threat and they would like to not have them deployed. Whether this is a serious venture or simply a ploy to get public opinion either here or in Europe on their side and hope to paralyze us in our determination to deploy remains to be seen, but I don't think that game has been played out either, and in that game, as in strategic forces, will is a very, very important factor.

FIRST STRIKE ISSUE

Senator SPECTER. General, I am concerned about your answer to a question on the first strike issue. You answered Senator DeConcini you do not believe in the policy of launch on warning but only in launch under attack. Later you said we should not discount a first-strike strategy, we should not say we have abandoned that. By planning for 100 MX missiles where they are certainly vulnerable, don't we enhance that position of a first-strike posture and put the world on even more of a hair trigger than it is now?

General SCOWCROFT. No, I don't believe we do. First of all, we are not supporting a launch under attack strategy, Senator. What I said was we can still wait for detonations, assuming the Soviets set forth detonations on our bomber bases in the United States. That is not launch under attack, that is launch after we have physically been struck to respond. Our NATO strategy, Senator——

Senator SPECTER. Wait, if you launch after you have been attacked, isn't that launch on attack?

General SCOWCROFT. If you remember, Senator, I said it is not possible for the Soviets at the present time to attack both our bomber bases and ICBM at the same time.

Senator SPECTER. Why can't they? You said they can attack our bombers from submarines, they can attack our ICBM's with their ICBM's.

General SCOWCROFT. That is right, but the difference in flight time insures that either the bombers or the ICBM's will get off if they try to do that. Let me explain to attack our bomber bases, they need to launch the SLBM force from close in. The SLBM forces are not now accurate enough to attack ICBM sites. So they have to use their ICBM's to do that. If they launch those first, that is ample time for our bombers to launch and therefore to be protected. So they cannot attack both at once.

NATIONAL WILL AND COHESION

Senator SPECTER. General, let me explore with you for a moment or two this question of national will and cohesion, which seems to

be the main theme of the Commission report, as I see it. In the Senate, we listen to the Pentagon and we listen to the people in our own States. I have a growing concern, and I am assessing it, as to whether the administration is properly assessing the national will. We face a very complex picture on Capitol Hill at the present time in our budget deliberations. We are looking at a $200 billion deficit and all that means to the economy. We are looking at the debate between the administration and the Congress as to whether it is the 7.5 percent, 5 percent, or 4 percent, and we have had a picture of substantial military buildup of $169 billion approximately in the last year of the Carter administration, which in fiscal year 1982 was $208 billion, in 1983 was $240 billion. Now we are looking at $270 billion in fiscal year 1984, which suggests to me there is quite a statement of national will.

Then we have the Bishops' letter which repudiates the concept of a first strike, which you want to reserve in our own thinking.

During the course of the past weekend I was in western Pennsylvania and raised the question of the MX missile with a number of audiences that I spoke to. After going through the considerations on both sides, and 1983 is not 1980 when President Reagan came in with our support on enhanced defense, there was very much a feeling in the land, at least in Pennsylvania, where I go frequently, that we cannot afford another unlimited military buildup. There is also concern about an MX missile which is deployed in a way to suggest a first strike, which is counter to a tremendous amount of public thinking, as exemplified by the Bishops' letter, and that the buildup of the MX is not really in keeping with an effort for arms reduction, and that debate about the freeze as opposed to arms reduction is very current. We just finished with Ambassador Adelman's nomination debate. So when we take a look at the national will, we in the Senate are very mindful and respectful of what you have said and what the President is proposing, but we get a very different feeling, I get a very different feeling from the people in my State, and that the national will is not really ready to spend $20 billion on a missile system which has the overriding import of first strike, which is vulnerable, especially when there are so many alternatives such as submarines, and such tremendous capability. I am suggesting to you, General, you can't really create national will by a commission's report.

General SCOWCROFT. Senator, I think your overemphasis, at least compared to what we did, is the element of national will. I think our fundamental belief is that, first of all, the overall import of our recommendations are to move us in the direction of greater stability, especially on our ICBM forces but across the board. We feel an essential element of getting where it is we feel we have to go is the MX and that we need to create an environment in which the small missile is most secure. And if we have to, for example, every time we deploy a small, single-warhead missile, the Soviets have the right to deploy an SS–18 follow-on, that is the kind of disparity in which the small missile likely is not a viable option.

In addition, we would hope to have an arms control environment which would avoid us having to deploy large numbers of small missiles. And we believe the MX is essential in order to move toward that environment.

Senator SPECTER. Thank you very much, General.
Thank you, Mr. Chairman.
Chairman HATFIELD. Thank you, Senator.
Senator Sasser?
Senator SASSER. Thank you, Mr. Chairman.

MX PERMANENT BASING REPORT

General Scowcroft, in support of the now abandoned dense pack basing mode, the Air Force provided the Congress with a classified report entitled, "MX Permanent Basing." Now this report at that time was classified as secret but substantial portions of the report are now unclassified.

And, Mr. Chairman, I ask unanimous consent that the unclassified portions of this report be included in the record at this point.

[The report follows:]

Strategic Forces Technical Assessment Review

EXECUTIVE SUMMARY

Background on President's Modernization Program

Upon taking office, President Reagan initiated a review of U.S. strategic forces and the need to modernize them. On 2 October 1981, following completion of his review, he announced a strategic forces modernization program to ensure continued freedom of the United States and our allies from coercion or nuclear attack. The President directed the continued development of the Peacekeeper missile (then known as M-X), near-term deployment in existing intercontinental ballistic missile silos, and selection of a permanent basing mode by 1984. Over the next several months, Congress reviewed the President's modernization program and directed that selection of a permanent basing mode be accelerated to December, 1982. As a result, several basing alternatives were studied by the Air Force, with review by numerous panels. A permanent basing mode, closely spaced basing, emerged from these efforts, and on 22 November 1982, the President announced his decision to deploy 100 Peacekeeper missiles in this mode, near F. E. Warren Air Force Base, Wyoming.

In December 1982, Congress, in passing the Continuing Resolution for FY 1983 funding, reviewed the President's decision. Because it had questions on the need for intercontinental ballistic missile modernization as well as the viability of closely spaced basing, Congress subsequently requested submission of a report containing:

- A technical assessment of closely spaced basing.
- A technical assessment of other basing alternatives.
- A technical assessment of intercontinental ballistic missile alternatives.
- A comparative assessment of alternative non-intercontinental ballistic missile strategic programs.
- A reaffirmation of closely spaced basing or a proposed alternative.

The Need for Intercontinental Ballistic Missile Modernization

For over 20 years, the United States has relied on a combination of intercontinental ballistic missiles, strategic bombers, and submarine based missiles--known as the Triad--to deter Soviet aggression. The elements of the Triad complement one another to ensure that, under all conditions, a sufficient strategic force could survive to retaliate after a potential Soviet attack. Attributes which intercontinental ballistic missiles bring to the Triad include accuracy and responsiveness; real-time communications with command authorities; short time-to-target; alert rates approaching 100%; and basing on U.S. soil. Historically, they have also been relatively invulnerable to Soviet attack.

Since the late 1960s, the Soviet Union has engaged in a massive strategic arms buildup that is creating a widening asymmetry between U.S. and Soviet forces, threatens our retaliatory capability, and is reducing the deterrent value of the Triad. They have deployed many thousands of increasingly accurate and powerful warheads on almost 1400 intercontinental ballistic missiles. This force provides the Soviets a capability to destroy most of our current intercontinental ballistic missile force using less than one-fourth of their present intercontinental ballistic missile inventory if the U.S. chose to ride out the entire attack.

The Soviets also have taken steps to reduce our ability to retaliate effectively against their strategic forces. They have reinforced the structures protecting their intercontinental ballistic missiles and much of their command and control network to the point where our most capable intercontinental ballistic missiles now have only limited ability to destroy them in a retaliatory strike. This imbalance in strategic capability -- the Soviets can threaten our intercontinental ballistic missiles while we have limited capability against theirs -- seriously undermines the strength of our nuclear deterrent. To redress this problem, the United States should:

- Deploy sufficient numbers of a new intercontinental ballistic missile with improved accuracy to neutralize the coercive advantage the Soviets now hold over our intercontinental ballistic missiles.
- Ensure basing sufficiently survivable to allow adequate decision time for credible, effective, timely retaliation, while retaining as many as possible of the unique characteristics provided by intercontinental ballistic missiles.
- Incorporate an inherent growth potential for the selected intercontinental ballistic missile modernization approach to counter Soviet responsive actions.
- Initiate deployment as quickly as possible to meet these military requirements and demonstrate our national resolve to maintain a stable strategic balance.

Intercontinental Ballistic Missile Modernization Alternatives

Modernizing the intercontinental ballistic missile portion of the Triad involves the development of a new missile and a basing system. In this review, four missile alternatives and nine methods of basing the missile were considered. The missile alternatives were Peacekeeper, common missile, improved Minuteman III, and small missile. Basing alternatives included closely spaced basing, closely spaced basing with concealment, widely spaced basing, south side basing, multiple protective shelters, road mobile, hard road mobile, deep basing, and existing Minuteman silos. Additionally, the ability of the Trident II to accomplish the ICBM mission was analyzed. The various missile and basing alternatives are described below.

MISSILES

- **Peacekeeper.** A 195,000 pound missile that has completed initial development and is ready for flight testing.
- **Common Missile.** A variant of the Navy Trident II (D-5), which could be expected to be ready for flight testing in 1987.
- **Minuteman III.** An improved version of the fully developed and fielded solid propellant missile, which is the current mainstay of the land-based intercontinental ballistic missile force.

- **Small Missile.** A lightweight two or three stage solid propellant intercontinental ballistic missile which is currently in advanced technology development.

BASING

- **Closely Spaced Basing:** Missiles deployed in vertical superhardened silos spaced approximately 2000 feet apart.
- **Closely Spaced Basing With Concealment:** Missiles deployed as in closely spaced basing with more silos than missiles. The missile location is concealed through system design and operational procedures.
- **Widely Spaced Basing:** Missiles deployed in vertical superhardened silos spaced a few miles apart.
- **South Side Basing:** Missiles deployed in superhardened silos on the south side of mesas.
- **Multiple Protective Shelters:** Missiles deployed in horizontal shelters of relatively low hardness spaced approximately one mile apart, with more shelters than missiles.
- **Road Mobile - Soft:** Missiles deployed on mobile launchers which travel continuously on public roads.
- **Road Mobile - Hard:** Missiles deployed on hardened transporters which are deployed on military reservations with dash on warning capability.
- **Deep Basing:** Missiles deployed deep underground.
- **Existing Minuteman Silos:** Missiles deployed in existing Minuteman silos.

Missile Assessment

A detailed technical assessment of the four intercontinental ballistic missile alternatives was conducted, focusing on the areas of military capability, hardness, transportability, schedule, and development status. The results are summarized below.

The Peacekeeper missile rates outstanding in all categories except transportability. The size and weight of the missile and transporter are not compatible with existing public highways. Therefore, Peacekeeper transportability is marginal. It is noted, though, that special roads could be constructed so that Peacekeeper could be moved in a concealment mode. The other factors are rated outstanding based on the status of the development program and the hardness requirements incorporated into the missile hardware. The advanced inertial reference sphere guidance system provides high accuracy, and, with the Mark 21 warhead, excellent hard target capability. The footprint (target coverage) of the missile is large. Its high throw weight provides the flexibility to incorporate alternative payloads to respond to potential Soviet developments such as superhardening. The missile was designed to withstand loads and nuclear effects well beyond the capability of current intercontinental ballistic missiles. Peacekeeper is ready for flight test and can be ready for deployment in 1986.

The common missile was defined in the 1978 Air Force/Navy commonality study. The intent was to reduce costs by developing and building one missile to meet the needs of both services. No significant cost savings were identified, therefore no further common missile definition has occurred. Initiating a program today would not permit deployment

of a new land-based missile until 1990 at the earliest. If it were configured for land and sea deployment, the common missile would have intercontinental ballistic missile deficiencies. Its military capability would be less than Peacekeeper since it would use a stellar-inertial guidance system which is less accurate at intercontinental ballistic missile ranges than the Peacekeeper advanced inertial reference sphere system. It would be possible to incorporate an advanced inertial reference sphere guidance system, achieving accuracy equivalent to Peacekeeper, but this would impose at least an additional one year delay in initial operational capability. The throw weight would be 40% lower than for Peacekeeper leading to reduced payload flexibility, and footprint capability. The hardness of the common missile, as defined in the 1970s, would be less than Peacekeeper. Although it would be smaller than Peacekeeper, the common missile would still require a special transport vehicle that would not be compatible with existing public highways.

Improved Minuteman III would incorporate the advanced inertial reference sphere guidance system, achieving accuracy equivalent to Peacekeeper. However, its military capability would still be less than Peacekeeper because of throw weight and footprint limits. The missile would have limited flexibility to incorporate alternative payloads. Its hardness would be limited by the current missile structure, and is much less than Peacekeeper's. Incorporating missile modifications would require design, development, and test programs so that 1988 would be the earliest possible initial operational capability. The missile is currently transported over the public highway system in areas where it is deployed. Although it is feasible to transport the entire missile, the system is designed for alert and launch from a vertical position. Therefore, significant modifications would be required for use in a mobile deployment.

The small missile could be available in 1990 at the earliest, because it is currently only in concept development; that is, studies are under way but no component or subsystem development has been initiated. The military capability of the small missile is dependent on the guidance system used. In a silo basing mode advanced inertial reference sphere could be used, giving accuracy comparable to Peacekeeper. In a mobile basing mode, with a stellar inertial guidance system used, the accuracy would be less. It may be possible to incorporate an advanced inertial reference sphere system, giving high accuracy, in a mobile deployment. This would impose at least a two to three year delay in initial operational capability. The missile has very limited payload flexibility because of its low throw weight. The small missile could have a hardness equivalent to Peacekeeper. It is small enough to be transported by truck over the existing public highway network.

System Alternatives

Detailed technical assessments of the basing alternatives were accomplished by considering the applicability of the four missile alternatives to each of the basing alternatives. Systems were sized to achieve a normalized capability of 1000 warheads. The one exception was multiple protective shelters, which was sized according to the baseline system of the 1979-1981 period (200 missiles). Based on the results of the missile assessment, Peacekeeper was used as the baseline missile for all alternatives where its deployment is practical. Due to Peacekeeper's size and weight, large vehicles which are

not compatible with existing public highways are required for movement, therefore, Peacekeeper was not considered in the mobile alternatives; the small missile is used as the baseline for these alternatives. Additionally, the small missile and improved Minuteman were selected as alternative baseline missiles for closely spaced basing and Minuteman silos, respectively. All other missile/basing combinations which were deemed feasible were considered as excursions. Baseline systems and excursions are shown in Table 1.

Table 1. Baseline System Alternatives

Basing Mode	Missile (Number of Missiles/Number of Silos or Shelters)			
	Peacekeeper	Common	Improved Minuteman III	Small
Closely Spaced	100/100	170/170*	350/350*	1000/1000
Closely Spaced With Concealment	100/300	170/300*	350/1050*	—
Widely Spaced	100/100	170/170*	350/350*	—
South Side	100/100	170/170*	350/350*	—
Multiple Protective Shelters	200/4600	—	—	—
Road Mobile - Soft	—	—	350/350*	1000
Road Mobile - Hard	—	—	350/350*	1000
Deep Basing	100	—	—	1000*
Existing Minuteman Silos	100/100	170/170*	350/350	—

*Excursions from baseline alternatives

Basing Assessment/Evaluation

The technical assessment and evaluation were conducted for each baseline system alternative as well as the missile excursions. The technical assessments addressed how the systems derive survivability; likely Soviet approaches for attacking the system; siting, environment, and public interests; the ability of the systems to respond to Soviet threat growth; technical issues/risk due to the status of the technology required by the basing mode; and arms control and foreign policy issues.

The evaluation, which incorporated the results of the technical assessments, involved criteria in three areas: strategic capability, system feasibility, and policy considerations.

Strategic Capability

- **Deterrence.** The ability to discourage coercion or nuclear attack on the United States or its allies. Deterrence is measured from the point of view of the adversary; therefore, the assessment is from a Soviet view of our military

capability. Subfactors of deterrence are: U.S. launchable weapons, Soviet attack durations, Soviet attack requirements, Soviet attack confidence, U.S. military capability, including prompt hard target capability and U.S. survivability.

- **Military Capability.** The capability to place Soviet hard targets at risk and be promptly launched to meet military objectives. The assessment is from a United States view of capability. Subfactors include: Soviet hard targets at risk, and U.S. promptness, command, control, and communications survivability, retargeting capability, alert weapons, and launch opportunities from a U.S. view.

- **Survivability.** Measure of the system capability to survive an attack from the U.S. view.

- **Endurance.** Measure of the system to maintain a launch capability for a protracted period in a post-attack environment for those surviving assets.

- **Resiliency.** An assessment of the system capability to counter responsive threats. Three subfactors are: survivability against long term responsive threats, Soviet threat stress, and U.S. growth options.

- **Defendability.** An assessment of the adaptability of ballistic missile defense, to counter threat changes and/or growth. The assessment includes both potential effectiveness and deployment implications including system size, technology requirements and impact. Subfactors include: defense system contribution to deterrence, military capability, survivability, endurance, resiliency, feasibility, and arms control.

System Feasibility

- **Cost.** Weapon system costs (including development, production and military construction), operations and support costs, and the total life cycle cost (10 year). All alternatives have been costed on a consistent basis with the best available system definition and cost data. The relative confidence in the cost estimates varies with the maturity of the system definition.

- **Schedule.** An assessment of the year of initial operational capability (10 fielded missiles), and the year of full operational capability. Two subfactors: initial operational capability schedule and full operational capability schedule are included.

- **Technical Risk.** An assessment of the system in terms of the technical risk involved in development, production, deployment, and operation.

- **Operability/Supportability.** An assessment of the system requirements in terms of four subfactors: operability, maintainability, security, and logistics.

- **Siting.** An assessment of siting opportunities in terms of the number of geographical areas that meet system requirements and a measure of flexibility of accommodating presently unforeseen constraints. Siting technical feasibility considerations are included.

- **Environmental.** An assessment of the environmental impact of a system ranging from socioeconomic to resource impact. Six subfactors used in this assessment are: socioeconomics, biology, air quality, water resources, land use, and cultural resources.

- **Public Interface.** A measure of the frequency of travel/movement on public roads of the nuclear warhead and/or missile during system operation.

Policy Considerations

- **Arms Control.** An assessment of the compliance of the system with provisions of existing strategic arms agreements (as consistent with the interim no-undercut policy) and support for U.S. objectives in future strategic

arms agreements. The interim no-undercut policy, which is neither permanent nor legally binding, generally implies restraint from actions that would represent irreversible acts with respect to provisions of existing agreements. Subfactors to assess compatibility with existing agreements are: relocation or construction of additional fixed intercontinental ballistic missile launchers, and launcher modernization constraints. An assessment of an alternative's support for U.S. START objectives of militarily-significant reductions, adequate verification and leverage for successful negotiations. Six subfactors are used: system availability (leverage is highly dependent on the availability of the system; a system with a later availability provides less leverage in the current START negotiations than a system with a nearer term initial operational capability), maintenance of an active missile production capability, force effectiveness (capability to meet mission requirements with reduced forces), near-term demonstration of a U.S. modernization program, credible prompt offensive capability that diminishes Soviet utility of large intercontinental ballistic missile forces (Soviet incentive to negotiate reductions of large intercontinental ballistic missiles), and effective verification.

- Foreign Policy. The impact of the alternative on perceptions of the United States foreign policy in two areas: deterrent credibility and support for NATO modernization. Perception of support for NATO nuclear force modernization is likely to be heavily influenced by the availability of the system. A near-term deployment has greater influence on allied support of NATO nuclear force modernization than systems with later availability. Subfactors are near-term demonstration of U.S. resolve and will to modernize, perception of U.S. capability to counter the threat created by massive Soviet deployments, contribution to flexible response capability, and commitment to sovereign basing.

Evaluation Results

The results of the evaluation for the baseline alternatives are summarized below. It is noted here that the ratings are based on a desired 1986 initial operational capability. The Trident II program, although it could not be evaluated on the same basis as the intercontinental ballistic missile alternatives, is also discussed below.

Closely Spaced Basing

A deployment of 100 Peacekeeper missiles in closely spaced basing would enhance deterrence by significantly improving United States military capability. Additionally, its destruction by the Soviets would be difficult and uncertain. A significant force would survive the first Soviet attack wave and be available for prompt retaliation. A highly-coordinated multi-wave Soviet attack would be required to negate a closely spaced basing deployment. Such an attack would exhaust the SS-18 inventory. The system can endure for a fairly long period of time by going into a powerdown mode. A number of potential sites have been identified, with F. E. Warren AFB, Wyoming the preferred deployment area. The small land area required leads to low environmental impacts. Since the entire deployment area would be fenced by this concept, public exposure to the system would be minimized. Leverage against advanced threats could be achieved by using one of the growth options such as countermeasures, concealment, or ballistic missile defense. The use of a growth option with closely spaced basing would raise the Soviet attack price to such a level that the post-attack strategic balance could not be viewed favorably by the Soviets during the 1990s. The system would be compatible with SALT I and/or II if either were in effect at the time of deployment, is verifiable, provides negotiating leverage, and supports the U.S. objective of significant reductions. This deployment would demonstrate U.S. resolve to modernize our intercontinental ballistic missiles and would encourage

support of NATO nuclear force modernization. The silo hardness definition requires some additional verification testing but based on the DNA Silo Test Program, this appears to have low technical risk. The system could be available in 1986 at a cost of $26.4 billion to deploy and an additional $293 million per year for operations and support.

Closely Spaced Basing With Concealment

Closely spaced basing with concealment (100 missiles in 300 silos) preserves the positive aspects of closely spaced basing and provides even greater deterrence capability because of even greater effectiveness against Soviet threats. However, there is slightly greater technical risk because of the need to preserve location uncertainty. A larger land area will be required, which reduces siting flexibility, increases environmental impacts, and reduces the ability for treaty compatible defense, although, due to increased leverage, defendability overall is outstanding. Endurance, operability, schedule, and resiliency are equivalent to closely spaced basing. Public exposure would increase because of the need to move the missile from an area support center to an unadjacent array. As with closely spaced basing, the system would be compatible with SALT I and/or SALT II if either were in effect at the time of deployment, provides leverage for successful negotiations and supports arms reductions. It could be effectively verified through national technical means and additional cooperative measures. The system would cost $36.8 billion to deploy and an additional $400 million per year for operations and support.

Closely Spaced Basing - Small Missile

Closely spaced basing with 1000 small missiles would have outstanding survivability and deterrence capability since it preserves the characteristics of closely spaced basing with a large increase in the number of silos the Soviets would need to target. However, it could not be available until after 1990 because of the small missile development status. The advanced inertial reference sphere guidance system would lead to hard target kill capability equivalent to Peacekeeper. The increased system size reduces siting opportunities, and increases environmental impacts, public exposure to the system, and operability concerns. Endurance, resiliency, and foreign policy are the same as for closely spaced basing with Peacekeeper. The later initial operational capability gives less negotiating leverage than other earlier initial operational capability basing modes. In addition, its deployment would require the United States to reevaluate its proposed START missile ceiling. The system would cost $69.7 billion to deploy and an additional $650 million per year for operations and support.

Widely Spaced Basing

Widely spaced basing would provide fair deterrence capability. The major shortcoming of this system is its low effectiveness against projected and responsive Soviet threats. It would also be deployed over a large land area, increasing the land acquisition burden and related difficulties, and reducing siting flexibility. This would also make ballistic missile defense more difficult and complicate operability. The system, which could be available in 1986 depending on land acquisition, would, like closely spaced basing, generally support arms control and foreign policy objectives. Technical risk would be

identical to closely spaced basing. Public exposure, though slightly higher than closely spaced basing, would be low. Resiliency would be reduced, with ballistic missile defense and backfill (construction of new silos between widely spaced silos) to closely spaced basing possible. The system would cost about the same as closely spaced basing, with $28.9 billion required for deployment and $300 million per year for operations and support.

South Side Basing

South side basing can make a contribution to the United States posture against current threats. However, against projected and responsive threats, the effectiveness of this system decreases. Unlike widely spaced basing, suitable sites for south side deployment are extremely limited. Siting constraints make ballistic missile defense much more difficult, and with the limited siting opportunities, expansion becomes a problem. This reduces system resiliency. The system could be available in 1988. Technical risk is low and relates to superhardening and constructibility. The remote locations of potential sites leads to high environmental impacts. Arms control and foreign policy for this alternative are generally the same as for the other alternatives discussed above. However, the somewhat later initial operational capability could result in less negotiating leverage. The system would cost $27.6 billion to deploy and $300 million per year for operations and support.

Multiple Protective Shelters

The military capability of Peacekeeper in multiple protective shelters is outstanding based on the deployment of 200 missiles. The baseline concept of 200 missiles and 4600 shelters is effective against the number of warheads in the current Soviet arsenal. This effectiveness could be maintained against a constrained threat. However, in the absence of constraints on total number of reentry vehicles, the projected threat could overwhelm the multiple protective shelter system without an expansion in the number of shelters. In the face of an unconstrained threat, the system's survivability is low. However, the outstanding military capability would contribute to deterrence. A major drawback to multiple protective shelters is the large deployment area and construction requirements, which leads to substantial environmental impacts. This also limits system expansion, leading to a lower resiliency rating. Siting is fair, based on the identification of a limited number of suitable areas, and defendability is good since an effective non-treaty compatible defense is possible. There is technical risk associated with preservation of location uncertainty. System size and concealment requirements lead to significant operability concerns. Foreign policy and endurance are the same as for the superhardened alternatives. Multiple protective shelter would be compatible with SALT I and/or SALT II, if either were in effect at the time of deployment, is verifiable through national technical means, provides negotiating leverage, and is compatible with the U.S. goal of reduced forces. The system would cost $49.4 billion for deployment and $770 million per year for operations and support. System initial operational capability could be achieved in 1988.

Road Mobile - Soft

A continuously road mobile system has very high survivability. Its military capability

is not as good as most other alternatives since it has limited hard target kill capability (reduced accuracy). Increased accuracy may be possible with a two to three year delay in initial operational capability. The survivability with reduced military capability combine to still contribute to deterrence value. This road mobile system relinquishes the protection offered by a secure area on a military reservation for major exposure to the public. It is manpower-intensive. Significant cost penalties are incurred: operations in nonsecure areas and operations over large areas necessitate 20 to 30 maintenance and security locations with associated command, control, and communication connectivity. Technical risk would be determined primarily by a new, highly reliable transporter which would have to be developed. The system depends on development of a new small missile and therefore cannot be deployed until 1990. Public interface considerations could be a negative influence on meeting the IOC. System endurance following attack would be lower than the fixed alternatives since it would depend on resupply and personnel availability. Arms control and foreign policy impacts are generally the same as for the alternatives discussed above. However, verification would require additional cooperative measures and the proposed START ballistic missile ceiling would have to be reexamined. The decreased accuracy and system availability would reduce negotiating leverage. The later initial operational capability also would lessen influence on NATO nuclear force modernization. The system would cost $38.2 billion to deploy and almost $3 billion per year for operations and support. Defendability is not applicable to this system.

Road Mobile - Hard

Deployment of the small missile in hardened vehicles on military installations with dash-on-warning capability would provide high survivability with sufficient warning. Like the road mobile alternative discussed above, the system would have limited hard target capability, unless initial operational capability is delayed until the mid-1990s. Endurance and schedule for this system would also be the same as for the public highway mobile system. Defense of the system would be possible because of the smaller area. However, since the defense system would probably not be compatible with the Anti- Ballistic Missile Treaty, defendability is rated fair. Technical risk would be somewhat higher than the other mobile options, since the transporter must be harder than any vehicle previously built, achieve fairly high speeds for a vehicle of its weight, and be very reliable. The need for adequate warning to achieve the survivability is a significant factor in system operation. Operability is better than for the public highway alternative because of the smaller operating area, but the large number of vehicles and missiles is still a maintenance concern. Public interface is reduced since the system would be restricted to military installations during normal operations. However, the restriction to military installations reduces siting opportunities and the need to construct new roads increases environmental impacts. Arms control and foreign policy objectives are the same as for the above mobile options. Verification would require additional cooperative measures, and deployment would demonstrate resolve to modernize. However, decreased accuracy and system availability would reduce negotiating leverage. The later initial operational capability of the system also would lessen its influence on NATO nuclear force modernization. The system would cost $45.7 billion to deploy and over $2.3 billion per year for operations and support.

Deep Basing

Deep basing has outstanding survivability against projected threats, very long endurance since it is self contained, and resilience to responsive threats. Due to the inability of the attacker to determine with confidence the probable survivability levels of a deep-based site and to monitor the progress and success of an attack, he has a low level of confidence in ensuring system kill. Its lack of prompt response reduces military capability, but the outstanding survivability leads to a good contribution to deterrence. Deep basing cannot be available until the 1990s, which will lessen the perception in NATO countries of the United States' resolve to modernize, and would entail greater technical risk than most of the other alternatives, predominantly in the missile egress area. This risk may, however, be resolved as the design matures. A limited number of sites are candidates for deployment and environmental impacts would be high during the construction period. Operability would be fair. New verification techniques may be required, leading to a slightly lower arms control rating. The system supports foreign policy objectives. It would cost $60 billion for deployment and $420 million per year for operations and support. Defendability is not applicable for this system.

Existing Minuteman Silos - Peacekeeper

The deployment of 100 Peacekeeper missiles in existing Minuteman silos provides the United States with a substantial improvement in prompt hard-target-kill capability. This alternative allows near-term availability (1986) and has minimal environmental impact, since the sites already exist. It complies with the Strategic Arms Limitation Treaties, is verifiable, and would demonstrate resolve for intercontinental ballistic missile modernization. The system survivability is lower than other alternatives when viewed in isolation from other elements of the Triad. However, the increased military capability still contributes to deterrence. The system endurance, as a result of the low survivability, would be less than for the other fixed Peacekeeper alternatives. Technical risk would be low, as would public exposure. There would be some increased operability requirements beyond that of the current Minuteman force. Defense is possible with a non-treaty compatible system. Resiliency is poor, with the addition of defense the only option. Arms control and foreign policy are outstanding because the system would provide negotiating leverage and demonstrate U.S. resolve to modernize. It would be consistent with SALT I and/or SALT II if either were in effect at the time of deployment, and is verifiable by existing means. Deployment would cost $16.6 billion with a minimal increase in current Minuteman operations and support costs.

Minuteman Silo - Improved Minuteman

This alternative possesses many of the same attributes as Peacekeeper in Minuteman. Its initial cost is lower, but it would not be available until 1988. Although it generally supports arms control and foreign policy objectives, since it is not a new system, and is not as substantial an addition to our strategic forces, it provides only limited negotiating leverage and shows much less resolve to modernize our forces. System endurance would be lower than for Peacekeeper in Minuteman silos since this alternative does not have a powerdown mode. The system would cost $9.3 billion to deploy with no increase in operations and support costs over current Minuteman. However, while this alternative may have a low initial acquisition cost, it would require prolonging the life of our aging

Minuteman force. This may lead to frequent subsystem refurbishment requirements and subsequently higher cost.

Trident II

Substituting the Trident II for intercontinental ballistic missile modernization would require that the United States forego an early capability for prompt hard target retaliation. This alternative also would require that an increased portion of the strategic workload be accomplished by the sea-based and air-breathing forces, would allow Soviet concentration on both offense and defense against these two elements, and would reduce our hedge against degradation or failure of the remaining strategic force elements. The earliest initial operational capability for Trident II is late 1989. This date cannot be accelerated. Under the current or even accelerated SSBN procurement program, it would be 1993 before Trident II could actually assume the hard-target single integrated operational plan role that the Peacekeeper can provide in the 1980s.

Intercontinental Ballistic Missile Modernization and Triad Effectiveness

The results of this technical assessment and evaluation were based on evaluating alternatives for modernization of the intercontinental ballistic missile force in isolation. However, as previously mentioned, intercontinental ballistic missiles represent only one element of our strategic forces. Future intercontinental ballistic missile deployments must be viewed in terms of how they combine with our other current and planned strategic forces to complicate Soviet attack planning, reduce Soviet confidence in overall attack success, and stress Soviet technological developments.

How well a new intercontinental ballistic missile deployment combines with the existing Triad could be assessed through its contribution to total Triad effectiveness. The Minuteman silo alternatives would increase Triad military capability. However, they would be susceptible to the same Soviet threats as the existing Minuteman force. No new targets would be added, and the existing targets would be no harder for the Soviets to attack.

The alternatives which involve superhardened silos, closely spaced basing closely spaced basing with concealment, widely spaced basing, and south side basing would increase Triad effectiveness. In addition to increasing Triad military capability, they would require Soviet force structure changes in order for them to have any realistic attack capability. The small MIRVed warheads which the Soviets have been deploying would be ineffective against these alternatives. The Soviets would have to reverse fractionate their force: i.e., move towards fewer, larger yield warheads. Closely spaced basing imposes a further requirement: development of time-on-target control and/or totally new threats. The attack requirements for closely spaced basing would be such that the Soviets would find it difficult to attack it, our Minuteman force, and our bomber force at the same time.

Deep basing would increase Triad effectiveness since it could not be attacked by any foreseeable Soviet threat. However, the lack of prompt response in this system would

lead to a smaller contribution to Triad military capability. Multiple protective shelters would lead to a substantial increase in Triad military capability. A shortcoming is that the soft multiple protective shelters are vulnerable to the same threats as our current Minuteman force. The large number of multiple protective shelters would stress the Soviet's ability to target both the multiple protective shelters and Minuteman forces.

The mobile alternatives would provide a totally new element for Soviet attack planning to face. Their planning would entail the additional requirement of finding the target. Because the missiles would be dispersed over a large area, the Soviets would have to detonate a large number of weapons in a barrage attack to have high confidence of destroying the targets. The use of a hardened vehicle and incorporation of a dash capability would further complicate Soviet attack planning.

Providing a ballistic missile defense of any of these alternatives would raise the attacker's uncertainty in the outcome of the attack and increase the attack price, or alternatively increase the number of surviving intercontinental ballistic missiles. The effectiveness of the defense depends to a great measure on the basing mode of the defended missiles. A ballistic missile defense configured to comply with the anti-ballistic missile treaty constraints on numbers of launchers, radars, and interceptors would be effective in defense of the closely spaced basing alternatives, but would have limited utility defending other basing options.

Expanding the Trident II program would contribute survivability and hard target capability, but would constitute a major step away from a Triad. It would forego those unique and essential ICBM characteristics which provide the broad diversity needed for strategic deterrence.

Selection of an ICBM Modernization Approach

The results of the review of intercontinental ballistic missile modernization alternatives discussed above, indicate that only one missile, Peacekeeper, can meet the 1986 initial operational capability. Further, this date can only be achieved for Peacekeeper in closely spaced basing, closely spaced basing with concealment, widely spaced basing, or Minuteman silos. However, this should not be construed to mean that the other alternatives do not have merit.

A key objective in selecting a path for intercontinental ballistic missile modernization is that our intercontinental ballistic missile force be resilient. That is, we must select an approach which will contribute to strategic force effectiveness into the 21st Century. Resiliency was evaluated for all system alternatives, indicating that some systems can, by themselves, remain effective against Soviet reactive development through the addition of growth options. An alternative approach would be to deploy more than one intercontinental ballistic missile system: for example, one which meets near-term objectives, and another in the 1990s which will meet longer term objectives.

In other words. we must strive for flexibility in our intercontinental ballistic missile force. Mid- and far-term planning should provide several options since potential

outcomes are not easily projected. Having a mix of alternatives available would also improve our arms control/reduction negotiating leverage. The simple fact that we have a range of options, responsive to whatever path the Soviets pursue, could eliminate the need for new deployments and could even lead to bilateral arms reductions pursuant to future negotiations.

Conclusions

An urgent need exists to modernize the U.S. intercontinental ballistic missile force. Over the past 20 years many deployment alternatives have been examined with the intent of finding one which could ensure a survivable and militarily effective intercontinental ballistic missile force while preserving the many unique capabilities which intercontinental ballistic missiles provide to the U.S. strategic posture. This review of the most viable ICBM modernization alternatives suggests the following:

- Soviet intercontinental ballistic missile accuracy and capability improvements have been predicted since the early 1970s and have now come true sooner than expected.
- Current Soviet intercontinental ballistic missile capabilities have created dangerous and exploitable strategic nuclear force-on-force asymmetries. The United States must correct this problem as quickly as possible.
- To demonstrate national resolve and insure a strong U.S. START negotiating position, the United States needs to make a positive decision now on intercontinental ballistic missile modernization. That decision should include a modernization alternative which can begin to correct current U.S. force deficiencies at the earliest possible date.
- There are technically viable intercontinental ballistic missile deployment and technology program alternatives which, if implemented, could: redress the current imbalance in United States-Soviet strategic force capabilities; significantly enhance the United States ability to deter Soviet actions; add leverage and impetus to the U.S. START negotiating position; and provide for inherent growth potential to cope with a possible increase in the Soviet threat. The earliest possible initial operational capability for intercontinental ballistic missile modernization alternatives is 1986.
- There may not be a <u>single</u> basing alternative which simultaneously can enhance ICBM survivability and preserve the unique deterrent characteristics of intercontinental ballistic missiles—all within the constraints of cost, technical viability, arms control, and environmental compatibility. Consequently, a combination of deployment and technology program alternatives may represent the best approach for modernizing the U.S. intercontinental ballistic missile force.
- Based on this review, four intercontinental ballistic missile modernization program alternatives have been structured as depicted in Figure 1. Each consists of near-term deployment, technology development, and potential follow-on deployments.

All alternatives would provide a near-term increase in prompt hard target kill capability. Alternatives A, C, and D, demonstrate resolve to modernize and provide increased negotiating leverage. Alternatives C and D impose an increased cost to the Soviets, as they would be forced to reverse-fractionate to threaten the systems.

Alternative	Near-Term Deployment	Technology Development Program	Potential Follow-On Deployment
A	Peacekeeper in Minuteman silos	• Superhard silos • Small missile • Hard road mobile • Deep basing • Ballistic missile defense	• Peacekeeper in -Superhard silos -Deep basing • Small missile continuation • Ballistic missile defense
B	Improved Minuteman in Minuteman silos	• All of those above • Peacekeeper missile development and test	• Peacekeeper in -Superhard silos -Deep basing • Small missile continuation • Ballistic missile defense
C	Peacekeeper in new hard silos (wide spacing)	• Small missile • Hard road mobile • Deep basing • Ballistic missile defense	• Peacekeeper - Backfill to close spacing - Deep basing • Small missile continuation • Ballistic missile defense
D	Peacekeeper in new hard silos (close spacing)	Same as C	• Peacekeeper -Deep basing • Small missile continuation • Ballistic missile defense

Figure 1. Intercontinental Ballistic Missile Modernization Program Alternatives

Alternative D has the added advantage of very high resiliency, and would force the Soviets to develop new attack strategies and advanced threats. Alternative B has the advantage of lowest initial cost but the disadvantage of weaker demonstration of resolve and reduced negotiating leverage. It does not require the Soviets to develop new threats and has low resiliency, which is also true for alternative A. Further, improving Minuteman would require prolonged life for our aging Minuteman force and provide limited payload flexibility to respond to Soviet superhardening. Alternatives C and D require near-term superhardening technology validation, and alternative C has low effectiveness against projected and responsive Soviet threats.

The technology development programs for all alternatives would complicate Soviet planning and provide flexibility to respond to any future Soviet developments.

AIR FORCE POSITION ON REPORT

Senator SASSER. Now the report makes clear at the time the Air Force report was prepared in September 1982, the position of the Air Force was, and I quote, "The Soviets could attack MX in Minuteman silos in the same manner as they can our present Minuteman force and, consequently, the MX missile would be at risk."

"The ability of the current Minuteman basing to respond to the Soviet threat is poor," still quoting. "The use of the current Minuteman silos," still quoting the Air Force report of September 1982, "does not provide the required pre-launch survivability to withstand a Soviet first strike and promote strategic stability." Still quoting, "It is not resilient to future threats."

Now that is what the Air Force was saying in September 1982 about the proposition of putting MX missiles in Minuteman silos. In view of the Air Force's position on this matter in September 1982, General, why does the Commission now recommend Minuteman silo basing as though it was not considered vulnerable to put them in there?

General SCOWCROFT. Senator, we recommended it because we believe that that whole issue can be divided into two parts and that we are looking for the ultimate survivability, which as I suggested in my opening remarks is as a hedge against ASW breakthrough on the part of the Soviets which would put our submarine force at risk, that we do have some time. We don't know when, if ever, that will be. It is not here yet. We think we can safely have a few years to do it. Therefore, we thought it possible and at reasonable cost to divide this problem into its two parts and to deploy the MX in a manner which is no more survivable now than Minuteman forces, both because of the synergistic survivability that we just discussed with the bombers, in addition, we think now and for some time the Soviets, whatever they think about the test accuracy of the weapons, have to have enormous uncertainty about their ability operationally to successfully mount an attack to the force which has to be perfect if they are to achieve their objectives.

LESSONS FOR EMBARKING ON MX PROGRAM

Senator SASSER. Well, as I understand it, General, we first embarked on the MX program in an effort to close the so-called window of vulnerability that our ICBM had. Is that an incorrect statement?

General SCOWCROFT. We first embarked on the MX program as modernization for the Minuteman, and it was designed originally to go in the Minuteman silos.

Senator SASSER. Well, I understood the President to say that we were attempting to close the window of vulnerability, that our Minuteman missiles in their present silos were vulnerable to a first strike.

General SCOWCROFT. That is right, yes.

Senator SASSER. And we searched around for a basing mode to make the MX invulnerable to a first strike. Apparently we have abandoned that search, and I think you have been very candid in your statement and very forthcoming in saying that part of the

reason for that abandonment was because of the political problems. Do you wish to respond to that?

General SCOWCROFT. Yes, I wish to respond, but when you finish.

Senator SASSER. You have been very forthcoming now in saying, and I am quoting from an article in U.S. News & World Report, in response to a question about whether the particular window of vulnerability can be closed on ICBM's, you say, "There is no feasible way in the short run if you are speaking of survivability against a surprise attack."

Well, we have moved. We are trying to come up with a new missile that would not be vulnerable to a first-strike attack. We are going ahead with the same missile and saying we can't close the window of vulnerability, yes, this missile is vulnerable to a first-strike attack, but let's go ahead and build it anyway.

General SCOWCROFT. Senator, the problem I have with the way you put it is you are taking one part of what is an integrated proposal aside, and what we felt was, in view of the history, the past attempts to solve all of the ICBM problems with one missile deployed in one way, that instead we had to break the problem into two parts, and that is what we have tried to do and we have not ignored the problem of vulnerability and we are trying to solve the problem of vulnerability in a deliberate way through the deployment in the early 1990's of a small, single-warhead missile as the ultimate hedge, the ultimate assurance of the triad that the Soviets cannot destroy all at once. So we had deferred the solution of that particular problem and we believe that it is prudent to do so under the circumstance.

U.S. RESPONSE TO MILITARY SOVIET ATTACK

Senator SASSER. General, current doctrine, as I understand it, and the conventional wisdom is the United States would ride out an attack on its land-based ICBM's and then respond in a retaliatory second strike. Now the deputy director of the MX missile program, and I am sure he would like to retract this now if he could, has suggested that the administration might be considering a launch on warning doctrine. Now if the MX is indeed vulnerable as we are saying here to a first strike and would be destroyed in the Minuteman silos, aren't we putting ourselves on more of a hair-trigger alert, a launch on warning strategy than we would heretofore?

General SCOWCROFT. We think we are not, Senator. And we think, as I suggested before, that under the least likely of all the unlikely scenarios for nuclear war, that out of the blue, a massive attack would well destroy our ICBM force, in which case we would have whatever bombers or whatever ICBM force survived. We believe if a nuclear war comes about, and we think the chances are very small, it is likely to come about in a different way, arising from some more limited conflict or some crisis which for one reason or another gets out of hand. And we believe under virtually any other circumstances those forces would be available for use.

SELECTION FOR SERVICE ON SCOWCROFT COMMISSION

Senator SASSER. General, I have enormous respect for your opinions and, frankly, enormous respect for many of the members who served on your Commission. I think they are learned in their fields. I think they are dedicated Americans. But, in going through the list of individuals who served on that Commission, it appeared to me that every one of them who was selected heretofore stated that they supported the deployment of the MX missile. No the assertion has been made that those who did not favor the deployment were screened ahead of time, and if you didn't favor the deployment of the MX missile you weren't selected to serve on that Commission. Could you give us any information on that?

General SCOWCROFT. I really can't. I didn't select the Commission.

Senator SASSER. I understand that.

General SCOWCROFT. All I would say is that based on the discussions we had at the outset of our Commission, that there were a number of different attitudes about the MX and about the need for it, and there were several strong views expressed in a variety of different ways, but in the end we unanimously came to this package.

Now I will say honestly different members of the Commission would emphasize different parts of the package because we are not a homogeneous group ideologically, politically, although I would grant we do not include the full spectrum on this broad issue. But it was a unanimous judgment that this package, while we all recognize it is not a perfect solution, does represent both for our national security and in the interest of arriving at something which we can hope will set aside the divisiveness of the past decade both in terms of force deployment and arms groups, where each succeeding group has overturned what has been accomplished.

Chairman HATFIELD. Thank you, Senator.

Now I invite Senator Stevens.

MX AND ARMS CONTROL

Senator STEVENS. General, the START posture that we have enunciated is predicated on the ability to deploy 100 MX missiles if we do not reach an agreement in Geneva, is it not?

General SCOWCROFT. Yes, the current one.

Senator STEVENS. So that when you talk about the national will to continue the posture of the past four Presidents, you are really talking about our willingness to deploy these missiles if we are not able to reach an agreement with the Soviets which would lead to a change in that posture of being ready and willing to deploy the 100 MX; is that right?

General SCOWCROFT. Yes. But I would put it broader and I would say that the Soviets are gaging us constantly, as we are them, and they have the posture about which they are relatively comfortable now, no elements of which they are not prepared to give up without paying something for it. And it seems to me they are going to reasonably look and see if they have to pay anything. That is the mirror image of will.

Senator STEVENS. Last year when we worked on the continuing resolution, the conferees agreed that the President had the authority to deploy missiles that are built during the research and development phase if there is no arms agreement. In other words, they are missiles that are already being built. Can you envision an arms control agreement which would go toward your concept of a single-warhead and encompass the concepts that are being talked about here now, a graduated build-down concept for one, as a result of a negotiation where we went into the negotiation with a full range of options of the triad? Can you envision us being successful?

General SCOWCROFT. Yes, I can.

Senator STEVENS. My colleagues are gone now unfortunately, but I can remember at the time the last administration was negotiating arms agreements we cautioned our Members on this side of the aisle not to make comments about the inability of the President to reach an agreement that could be supported by the Senate. Some of us found fault with it after the result, but we were very cautious about any attempt to make statements which the Soviets could misunderstand and mistakenly presume that the President's ability to secure ratification of the treaty had already been impaired. Now I would like to know if we have the time to delay modernizing our ICBM force until after the negotiation, until after we see we can be successful?

General SCOWCROFT. I don't think we do because I don't think we are going to be successful unless the Soviets realize that it is in their interest to bring those negotiations to a successful conclusion, and it seems to me they have no particular incentive to now. They are quite comfortable for now and at least to the end of the decade when we will have new forces coming, in, quite comfortable with their posture, see no reason to give it up, especially as they can wait this time and see what develops in the West.

FIRST STRIKE FACTOR

Senator STEVENS. Now the question of first-strike capability of the MX's deployed in the vulnerable Minuteman silos has been raised. Isn't that a possibility that we might in the future shift our national stance on the item that would be something the Soviet negotiators would see readily and be even more ready to find a way to reach an agreement to prevent that change of policy as far as the United States is concerned?

General SCOWCROFT. I think absolutely so. I think they have to take much more seriously a weapon system which can put their forces at risk as opposed to the ones we have now with the probability so low that they would not consider a reasonable option.

APPROACH TO STRATEGIC ARMS LIMITATIONS

Senator STEVENS. On page 23 of your report, you make four statements, your Commission did. "Over the long run, stability would be fostered by a dual approach toward arms control and ICBM deployments which moves toward encouraging small, single-warhead ICBM's. This requires that arms control limitations and reductions be couched not in terms of launchers but in terms of equal levels of warheads of roughly equivalent yield."

That really envisions a change in the START posture that we have now, does it not?

General SCOWCROFT. Yes, it does.

Senator STEVENS. We are going to be hearing tomorrow from Secretary Weinberger, but I take it your Commission would not have made that report if it had not been in some way coordinated with the administration or people at least who are prepared to negotiate in Geneva?

General SCOWCROFT. They were aware of where we were planning to come out, and the President, of course, himself. The Commission's report is the President's report.

AVAILABILITY OF SMALL ICBM

Senator STEVENS. If the Congress decides not to take off the fencing that prevents the basing of the MX, if we fail to deploy the MX, or at least to give the authorization to deploy, let's put it that way, what is the earliest time either of new small missiles or the Minuteman III upgrade that we could be deemed by the Soviets to have been able to fully modernize our ICBM forces?

General SCOWCROFT. I think one cannot advance the deployment of the small missile by very much. We suggest around 1993. One might be able to accelerate it in part, Senator, but there are a number of uncertainties about the small missile that need to be cleared up. And if one were to go to it right now, I think you would find both in cost and in deployment mode a number of problems that have vexed us about the large missile. So we think it is going to take time to work that out. Interestingly enough, a Minuteman upgrade program would take longer than the deployment of the MX and we think would not do anything here, would not have the same results that an MX would.

SILO HARDENING

Senator STEVENS. Your report also recommended that we go ahead with some stepped up research on hardening of the existing silos.

General SCOWCROFT. Yes.

Senator STEVENS. That also would not escape the Russians' attention.

General SCOWCROFT. No, it would not. And while we do not base our recommendations on the success in hardening, we think there are some promising concepts that should they prove out at reasonable cost we might be able to significantly harden the silos in which we would put the MX, and, of course, would that prove out, we would recommend doing that.

START TALKS OBJECTIVES

Senator STEVENS. What was the stated term which is the objective of the START talks? How long would the agreement be?

General SCOWCROFT. I don't know offhand how long the agreement is. We feel that also in arms control that we need to try to develop at least in arms control a framework that is much more permanent than the periodic treaties that we have had, which un-

fortunately many of them lapsed at the time of the deployment of new systems.

SHORT-TERM TREATY AGREEMENTS

Senator STEVENS. That has been a penchant of the Soviets to have a short-term agreement which would require subsequent agreements to have the arms control mechanism continued?

General SCOWCROFT. Well, both sides earlier had felt that in an age of rapidly changing technology, we do not want to have treaties which technology would make obsolete too quickly. So it was sort of the consent of both sides that we have relatively short ones. But in 1974, for example, for SALT II, we changed the timeframe from 5 years. Originally, SALT II was supposed to run out in 1979 or 1980. We extended it out 10 years. And now it is our feeling, maybe not all the details, but at least the framework needs to go very far out in order to provide the kind of predictability in concept, if not in particular forces, that each side can adhere to.

Senator STEVENS. For those who believe in the gradual build-down concept, the time is now. If we allow the negotiating period of START to evaporate by misleading the Russians to believe another administration may be coming and it might be ready in 2 to 3 years to state a new posture for the United States, by that time the Russian position would be so solidified as far as their new missile and their deployment it would be almost impossible to reach a conclusion that we could convince them to enter a new approach such as graduated build-down, is that not correct?

General SCOWCROFT. I think that is certainly true, and I think non-deployment of the MX will raise greater questions about deployment of other systems.

Senator STEVENS. General, I am one who believes Geneva is a poker game that involves the future of the world and I want the administration to have all the chips on the table, and I hope the Senate and Congress does.

General SCOWCROFT. One of our Commission members is Mr. John Lyons, president of the Iron Workers Union. He has an eloquent statement likening our arms control negotiations to collective bargaining in which each side assesses the imperative of the other side and what their weaknesses are and they come to their conclusions on that basis.

Senator STEVENS. That is right, and if union members have voted that one fringe benefit out that was on the table already from management, it wouldn't be much of a negotiation. I really think that the experience of the ABM has to be looked at by Congress.

General SCOWCROFT. We feel strongly it should.

Senator STEVENS. Thank you very much.

Chairman HATFIELD. Thank you, Senator.

Senator Huddleston.

POSSIBLE SOVIET VIOLATION OF SALT II

Senator HUDDLESTON. General Scowcroft, in your statement this morning you said the Soviets are now in the process of testing two new missiles. Are you persuaded by evidence you have that they are in fact violating SALT II in testing two missiles?

General SCOWCROFT. Senator, that is a very complex question. The provision for one new missile in the SALT II was written in a way so as not in the early stages of testing to so bind one that one didn't have the flexibility to learn from the testing program and to modify the missile subsequently. So that the requirements in the early testing were really fairly loose—number of stages, tactical propellants, and so on. Now the two Soviet tests are of different kinds of different sizes of missiles. They both are apparently the same propellants and the same number of stages. And I think it is possible that technically they are within the SALT II provisions.

Senator HUDDLESTON. Technically within but in fact testing two new systems?

General SCOWCROFT. In spirit perhaps not.

Senator HUDDLESTON. I am wondering about whether they are in fact testing two new missiles.

General SCOWCROFT. Well, there are some statements they have made that the second missile they are testing is a modification of the SS–13, which was deployed 15 years ago. But it is a very complex question to answer, as I say, on one spirit, on the other technically.

Senator HUDDLESTON. Your statement said flatly they were testing two new ones, and I just wondered if you knew something the rest of us didn't know or had drawn a conclusion.

General SCOWCROFT. That was to show it was a complicated situation.

Senator HUDDLESTON. So far the committee hasn't made any determination as to whether they are in fact violating SALT II for testing two missiles.

General SCOWCROFT. That is my understanding. Secretary Dam would be the better one to ask.

Senator HUDDLESTON. General, I am somewhat curious about the switch in emphasis that Senator Sasser discussed. I think there is no doubt that the MX missile has advanced to the point it has beause of the rhetoric that we heard from more than one President regarding a window of vulnerability that had to be closed. Now we find that is not the driving force behind the recommendation made by your Commission, and in fact we have switched justification for the missile from closing the window of vulnerability to providing some kind of inducement to get the Soviets to bargain more reasonably on arms control. I understand the statement that you make.

General SCOWCROFT. Senator, all we have really done is change the timeframe. We have not changed our feeling that it is necessary to make our ICBM's more invulnerable.

MOBILE BASING FOR MIDGETMAN

Senator HUDDLESTON. But the thrust of what your Commission says as far as survivability is concerned moves toward the Midgetman, and I think you said almost certainly includes a mobile basing system; is that not correct?

General SCOWCROFT. We think that is most likely. It would depend in part on the arms control framework. If in fact by then we had reached a stage of fairly sharp reduction in numbers, it might even be possible to deploy a small missile in silos.

Senator HUDDLESTON. Did your Commission make any estimate about the potential cost of establishing a mobile missile system, the cost of operating it, and the logistics of operating, how it would be moved, by railroad or however?

General SCOWCROFT. Yes, we did look at a number of those things. It is very speculative at the present time, Senator. What we felt was perhaps most promising is the possibility of developing a hardened mobile vehicle which would carry the small missile and then could be deployed on military bases on some of the larger ones in the West and still not be subject to barraging by the Soviets with the relatively few warheads which would destroy the whole thing.

Senator HUDDLESTON. Would that eliminate the necessity for all the ancillary equipment that would have to go along with the system, the security, manning the control, how many people would have to be involved?

General SCOWCROFT. Again, that is still speculative. But if one can deploy on them, one cuts the security and ancillary forces sharply than if we attempted open deployment.

Senator HUDDLESTON. It would need to be more than a vehicle traveling down the road or railroad.

General SCOWCROFT. Yes. The key point, Senator, is there is no question that a mobile missile and a small missile with only one warhead per missile is going to be more expensive than a large, many-warheaded missile in a silo.

Senator HUDDLESTON. Do you agree with the $100 billion figure?

General SCOWCROFT. I think that is high.

OTHER MX DEPLOYMENT POSSIBILITIES

Senator HUDDLESTON. Several members of the Commission and even members of the Joint Chiefs, perhaps yourself have indicated that if you had your druthers from the strictly military effectiveness standpoint, that you would have made a different recommendation on deployment of the MX; is that correct, and what would that recommendation be?

General SCOWCROFT. Well, Senator, if we look at some of the other deployments, take the multiple protective shelter of the Carter administration, that is in a sense the functional equivalent of a small, single-warhead. Conceptually, it distributes the warheads over a large number of empty silos. As long as you can preserve the uncertainly of the actual location of the missile, you do have the equivalent of going to a small missile and reducing the value of the target very sharply. We feel that, however, because of the past history, the land acquisition and in addition the cost, which is very high for the MPS system, that that was not a realistic alternative for us to consider.

Senator HUDDLESTON. Did you have any kind of indication, I am sure many of our people are in contact daily with the counterparts in the Soviet Union, that deploying the MX missiles, 100 of them as suggested, would in fact be a matter of concern, would in fact be an inducement even above and beyond the concern that they have already shown for the cruise missiles, Stealth, and the Pershing

missiles? In my intelligence experience, I haven't found they are very much concerned about the MX missile.

General SCOWCROFT. I think it would be definitely an inducement because it is the only specific counterpart to the things that we fear most, which are their large, accurate ICBM warheads. I think in terms of their ability to cope, I think they may in fact be worried about the cruise missile more, but as a device by which the United States might circumvent the arms control and flood the system with cruise missiles. But they will not be panicked by the MX, they will take it very seriously.

Senator HUDDLESTON. They are not going to wring their hands and say we have to do something in immediate parallel and we better get to the bargaining table and try and eliminate it, you don't think?

General SCOWCROFT. No, I think we will get them to the bargaining table, because if, for example, the Congress approves, the Soviets don't know whether that is the first pawn or last pawn.

Senator HUDDLESTON. You mean they will come?

General SCOWCROFT. Yes.

Senator HUDDLESTON. Thank you.

Chairman HATFIELD. Thank you, Senator.

Thank you very much for your time and testimony this morning. It has been very helpful to the committee. We will now excuse you.

General SCOWCROFT. Thank you very much, Mr. Chairman.

DEPARTMENT OF STATE

DEPUTY SECRETARY OF STATE

STATEMENT OF KENNETH W. DAM, DEPUTY SECRETARY, DEPARTMENT OF STATE

PREPARED STATEMENT

Chairman HATFIELD. The Acting Secretary of State, Kenneth Dam.

Mr. Secretary, we will have your full statement placed in the record, and I wonder if it is possible to highlight within the timeframe, since there are so few Senators at this point, if you could remain for maybe a few minutes of question.

Mr. DAM. Yes, indeed.

Chairman HATFIELD. Then we will finish up with the other questions with Admiral Howe. Is that satisfactory?

Mr. DAM. Indeed.

[The statement follows:]

PREPARED STATEMENT OF KENNETH W. DAM

DEPUTY SECRETARY

DEPARTMENT OF STATE

Mr. Chairman, Members of the Committee.

I appreciate the opportunity to appear before this distinguished committee in support of the President's recommendations to the Congress on strategic modernization.

Tomorrow, Secretary of Defense Weinberger and General Vessey will address the military aspects of our strategic force posture. Today, I shall discuss the foreign policy and arms control implications of the President's strategic modernization program.

Maintaining an effective and stable nuclear deterrent presents the President and the Congress with difficult and complex choices. As the Chairman of the President's bipartisan Commission on Strategic Forces, General Scowcroft, has said: "There are no simple solutions to the questions that must be answered in basing our forces, achieving equitable arms control agreements and improving strategic stability."

As this committee knows, the specific issue of a new American ICBM has been debated hotly for almost a decade. It is time that we made a decision. And, in my view, that decision should be to proceed with production and deployment of the Peacekeeper missile.

There has been consensus on the need for a new ICBM for many years now. Each of the past four Presidents has supported the development of a new ICBM, and the Congress

has been supportive as well. It is the choice of a basing mode for that new ICBM that has complicated the production and deployment decision.

The President's bipartisan Commission on Strategic Forces has completed its review of the overall U.S. strategic posture. The Commission studied a number of alternative basing modes for a new ICBM, consulted with Congress, and presented unanimous conclusions concerning U.S. strategic forces and arms control. The Commission conclusions have now been accepted by the President, and the President's recommendations are before the Congress. These recommendations provide the basis for developing a broad national consensus.

Let me now address the foreign policy implications of those recommendations.

Foreign Policy and the Strategic Balance

The most important goals of our defense and foreign policy are to prevent war and to maintain a just peace.

The foundation of peace in the nuclear age has been America's strategy of deterrence. Since we first acquired nuclear weapons, the United States has sought to prevent war by discouraging aggression against the United States and its allies. By presenting any potential aggressor with the prospect of certain retaliation, peace has been maintained for nearly 40 years. The history of the 20th century makes it sadly clear that peaceful intentions and good motives alone will not stop aggressors. Adequate military strength does do so, and the strategy of deterrence has been successful in protecting the security

of America and Western Europe since the end of World War II.

The strategic balance, however, has dimensions beyond deterrence. That balance shapes the global context in which American foreign policy operates. As Deputy Secretary of State I am acutely aware that America's military strength is vital to the conduct of foreign policy. Our perceived strengths and weaknesses directly affect our ability to achieve our goals. Therefore, the decisions we make or fail to make on weapons programs are bound to influence the judgments not only of our adversaries but also of our allies and friends around the world.

The growth of Soviet military power relative to the United States over the past ten years has had a direct effect on Soviet willingness to challenge America's interests around the world. Moscow is using its power directly in Syria, Poland and Afghanistan, and indirectly through its proxies in Angola and closer to home in Central America. These are the tangible manifestations of growing Soviet power.

Our concern is that unless we maintain a strategic nuclear balance between the United States and the Soviet Union, the problem of Soviet adventurism will persist and may get even worse.

If for example, the Soviets are able to strike effectively at our land-based ICBMs while we do not have comparable capability, Moscow might believe it could gain political leverage by a threat of nuclear blackmail.

Without arguing the question of whether the Soviets are prepared to launch a nuclear first strike, one can recognize that such a crucial imbalance in strategic capabilities could well make them bolder in a regional conflict or in a major crisis. That situation can not be in the interest of either this nation or of world peace.

Our visible commitment to maintaining the strategic balance is also essential to sustain the confidence of our friends and cohesion of our alliances. While we have debated among ourselves, and tabled serious arms control initiatives at the negotiating table, the Soviets have deployed -- repeatedly. Over the past decade the Soviets have deployed three new ICBMs. They have tested two more in the last six months and have at least two additional new types of ICBMs in development.

What would our allies and other nations conclude about American strength, resolve and reliability if we were to fail to deploy a new ICBM in the face of these Soviet developments?

Our foreign policy, and our ability to defend our interests and our most cherished values, will be decisively strengthened if the Congress gives strong backing to the program the President announced last month.

Modernization of our deterrent, and of our land-based ICBM force in particular, is essential to the goals of preventing conflict, reducing the risks of war, and demonstrating our resolve to adversaries and allies alike.

At the same time, it will also increase Moscow's

incentive to negotiate seriously in START (Strategic Arms Reduction Talks) and other arms reductions talks. Let me say more on that subject.

Arms Reduction and the Strategic Balance

It is important to note that the Scowcroft Commission did not consider the ICBM problem, or even our overall strategic posture, in isolation from other issues. They also considered the relationship between strategic programs and arms control.

The Commission made clear that there was a necessary complementarity between strategic programs and arms control. Both arms control and modernization programs can affect the strategic balance. Vigorous pursuit of both is the best course to pursue. To quote the Scowcroft Commission Report: "Our arms control proposals and our strategic arms programs should thus be integrated and be mutually reinforcing.

They should work together to permit us, and encourage the Soviets, to move in directions that reduce or eliminate the advantage of aggression and also reduce the risk of war by accident or miscalculation."

President Reagan adopted this dual approach early in his Administration. When he announced his modernization program, he also announced that the United States would negotiate with the Soviet Union to achieve mutual and deep nuclear arms reductions. We are now negotiating seriously with the Soviets in Geneva on both intermediate range and strategic nuclear weapons.

If we have learned anything from our experience in arms control negotiations over the last two decades, we should have learned this fundamental truth: the process of arms control depends on the demonstrated ability of the United States to maintain an effective strategic force. This, in turn, depends, as it always has, on maintaining a modern, capable triad of strategic forces. The Peacekeeper ICBM is a critical component of that modernized triad.

As a lawyer, I know that negotiations begin only when both parties believe they have something to gain by talking or something to lose by failing to talk. Without the incentive of gain or loss provided by our modernization program, the Soviets would see no advantage in negotiating seriously to reduce their own nuclear force.

The Peacekeeper represents the response that each of the past four administrations has considered necessary to offset, at least partially, the formidable Soviet ICBM arsenal. The question now before us is whether we shall abandon this decade-long modernization program.

As the Scowcroft Commission Report reasoned: "It is illusory to believe that we could obtain a satisfactory agreement with the Soviets limiting ICBM deployments if we unilaterally terminated the only new U.S. ICBM program that could lead to deployment in this decade.... Abandoning the MX at this time in search of a substitute would jeopardize, not enhance, the likelihood of reaching a stabilizing and equitable agreement."

The Commission's recommendations included more than

support for deploying the Peacekeeper missile. The Commission also recommended, and the President agreed, that the full modernization program begun in 1981 be continued.

It also recommended development of a new small single-warhead missile and continuation of research on survivability improvements for our ICBMs, including active defense and silo hardening.

Mr. Chairman, questions have been raised about whether the proposed modernization program is consistent with our arms control objectives and our obligations under past arms control agreements. Let me assure you that the proposed program is fully consistent with those objectives and obligations.

The Peacekeeper is consistent with all specific provisions of existing SALT agreements. Deploying 100 of the new missiles in existing Minuteman silos, as the President proposed, would involve no construction of new fixed launchers, no increase in silo volume, and no increase in MIRVed (multiple independently-targetable reentry vehicle) ICBM launchers. Moreover, the 100 new Peacekeeper missiles in Minutemen silos are obviously far too small a force to be destabilizing.

Some have wondered, however, how the development of a small ICBM in addition to the Peacekeeper would be consistent with either SALT II or a possible START agreement.

The SALT II Treaty would have permitted deployment of no more than one new ICBM on each side. On our side, the new missile would be the Peacekeeper. But that treaty, even

if it had been ratified, would have expired at the end of 1985. The President's proposal calls for the start of engineering development of a new small ICBM, but no deployment would be possible until after 1990 -- long after the SALT II time period had expired. And long before that time, we would hope that a START agreement will have established a new regime for maintaining a stable strategic balance.

Beyond this, the new small missile, if it proves feasible, would have broader, positive implications for arms control. It would enhance stability, because it would be more survivable, and stability has always been a central objective of arms control since the process began. As Secretary Weinberger has explained, it may move the evolution of strategic systems in a stabilizing direction over the long term. The basic concepts underlying our START proposals are flexible enough to accommodate this small missile.

Mr. Chairman, the U.S.-Soviet strategic competion will continue into the long-tern future. And there is no guarantee that a restructuring of U.S. and Soviet forces in the direction of single warheads will take place in the near future. But we believe both sides have real incentives to move in this direction. In the meantime, we need now to take the hard decisions necessary to ensure a safe strategic relationship for the years immediately ahead.

Conclusion

To sum up, I share with the Secretary of State and the

Secretary of Defense the conviction that modernization of our strategic forces is a matter of the highest priority. A credible, flexible strategic force is not only vital to the balance of power but is the essential foundation of our role as leader and defender of free nations. The fundamental goal of nuclear deterrence depends on a credible force. Our goal of deterring non-nuclear war or nuclear blackmail also depends on it.

The Peacekeeper missile is indispensable to our near-term goals of restoring the strategic balance, achieving deterrence and providing an incentive to the Soviets for serious negotiations on arms reductions. Development of a small ICBM may well enhance strategic stability in the longer term. But as the Scowcroft Commission stressed, neither of the two systems can ensure security alone; they are complementary.

Strength and peace are also complementary. Both must be pursued with determination. And with that determination, both can be achieved.

ARMS CONTROL ASPECTS OF MX SYSTEM

Mr. DAM. Mr. Chairman and members of the committee, I am delighted to appear before this committee. You will hear tomorrow from Secretary Weinberger and General Vessey on the military aspects, and I would like to deal primarily with the arms control aspects of the MX question.

The most important goals of our defense and foreign policy are to prevent war and to maintain a just peace.

The foundation of peace in the nuclear age has been America's strategy of deterrence. I go into this in my statement to describe the history of that and to talk about the importance of the strategic military balance in our entire deterrence posture.

Our concern is that unless we maintain a strategic nuclear balance between the United States and the Soviet Union, the problem of Soviet adventurism will persist and may even get worse.

If, for example, the Soviets are able to strike effectively at our land-based ICBM's while we do not have comparable capability, Moscow might believe it could gain political leverage by a threat of nuclear blackmail. Without arguing the question of whether the Soviets are prepared to launch a nuclear first strike, one can recognize that such a crucial imbalance in strategic capabilities could well make them bolder in a regional conflict or in a major crisis. That situation cannot be in the interest of either this Nation or of world peace.

U.S. COMMITMENT TO MAINTAINING STRATEGIC BALANCE

Our visible commitment to maintaining the strategic balance is also essential to sustain the confidence of our friends and cohesion of our alliances. While we have debated among ourselves, and tabled serious arms control initiatives at the negotiating table, the Soviets have deployed—repeatedly. Over the past decade, the Soviets have deployed three new ICBM's. They have tested two more in the last 6 months and have at least two additional new types of ICBM's in development.

What would our allies and other nations conclude about American strength, resolve and reliability if we were to fail to deploy a new ICBM in the face of these Soviet developments?

MODERNIZATION OF U.S. MISSILE SYSTEM

Our foreign policy, and our ability to defend our interests and our most cherished values, will be decisively strengthened if the Congress gives strong backing to the program the President announced last month. Modernization of our deterrent, and of our land-based ICBM force in particular, is essential to the goals of preventing conflict, reducing the risks of war, and demonstrating our resolve to adversaries and allies alike.

At the same time, it will also increase Moscow's incentives to negotiate seriously to START and other arms reduction talks.

It is important to note that the Scowcroft Commission did not consider the ICBM problem, or even our overall strategic posture, in isolation from other issues. They also considered the relationship between strategic programs and arms control.

The Commission made clear that there was a necessary complementary between strategic programs and arms control. Both arms control and modernization can affect the strategic balance. Vigorous pursuit of both is the best course to pursue. I have in my statement the relevant portions of the Scowcroft report on that subject.

Now President Reagan adopted this dual approach early in his administration. When he announced his modernization program, he also announced that the United States would negotiate with the Soviet Union to achieve mutual and deep nuclear arms reductions. We are now negotiating seriously with the Soviets in Geneva on both intermediate range and strategic nuclear weapons.

If we have learned anything from our experience in arms control negotiations over the last two decades, we have learned this fundamental truth: The process of arms control depends on the demonstrated ability of the United States to maintain an effective strategic force. This, in turn, depends, as it always has, on maintaining a modern, capable triad of strategic forces. The Peacekeeper ICBM is a critical component of that modernized triad.

Now I am a lawyer, and I know as a lawyer that negotiations begin only when both parties believe they have something to gain by talking or something to lose by failing to talk. Without the incentive of gain or loss provided by our modernization program, the Soviets would see no advantage in negotiating seriously to reduce their own nuclear force. I think that really is the height of the matter on arms control.

The Peacekeeper represents the response that each of the past four administrations has considered necessary to offset, at least partially, the formidable Soviet ICBM arsenal. The question now before us is whether we shall abandon this decade-long modernization program.

As the Scowcroft Commission report reasoned:

> It is illusory to believe that we could obtain a satisfactory agreement with the Soviets limiting ICBM deployments if we unilaterally terminated the only new U.S. ICBM program that could lead to deployment in this decade * * * . Abandoning the MX at this time in search of a substitute would jeopardize, not enhance, the likelihood of reaching a stabilizing and equitable agreement.

Now I want to call your attention to the fact that there is a lot more being recommended in the report than just the MX and small missile, but also a program of other modernization steps, all of which have been endorsed previously by President Reagan, so I will pass over those. Let me go directly to the question of whether the recommendations which the President has adopted of the Commission would be consistent with existing arms control agreements.

The Peacekeeper is consistent with all specific provisions of existing SALT agreements. Deploying 100 of the new missiles in existing Minuteman silos, as the President proposed, would involve no construction of new fixed launches, no increase in silo volume, and no increase in MIRVed ICBM launchers. Moreover, the 100 new Peacekeeper missiles in Minuteman silos are obviously far too small a force to be destabilizing.

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Beyond this, the new small missile, if it proves feasible, would have broader, positive implications for arms control. It would enhance stability, because it would be more survivable, and stability has always been a central objective of arms control since the process began.

U.S.-SOVIET STRATEGIC COMPETITION

Mr. Chairman, the United States-Soviet strategic competition will continue into the long-term future. And there is no guarantee that a restructuring of United States and Soviet forces in the direction of single warheads will take place in the near future. But we believe both sides have real incentives to move in this direction. In the meantime, we need now to make the hard decisions necessary to insure a safe strategic relationship for the years immediately ahead.

Perhaps at this point I might respond to such questions as you might have.

Chairman HATFIELD. Thank you, Mr. Secretary.

Mr. Secretary, it seems to me I have been hearing a new term, or at least one that strikes me as being new, and that is bargaining leverage. Is this a displacement or replacement, substitute, for the term "bargaining chip" or is there a distinction?

Mr. DAM. Well, I think all those terms are somewhat related and they are shorthand for a basic proposition, that is, the Soviets are not going to give up something for nothing.

Chairman HATFIELD. If the MX is deployed as proposed, advocated by the administration, is it negotiable in an arms talk session?

Mr. DAM. Well, we certainly believe that the Peacekeeper missile is essential to our national security. At the same time, the President said everything is on the table. So it is not being advanced as something to be turned over. We think it is important, because we are negotiating seriously and we believe that we have to be prepared to negotiate about everything. That is what the President said.

NEGOTIABILITY OF DEPLOYED MX

Chairman HATFIELD. So, consequently, it would be conceivable that an agreement could be reached in which the MX could be traded for something at the negotiating table?

Mr. DAM. It is conceivable. We are for sharp reductions in the level of nuclear arms. Thus far, the Soviets have been on the other side, they have not been for substantial reductions—small reductions. So we are really not faced with that situation. That is an extremely hypothetical question, Mr. Chairman.

Chairman HATFIELD. It is really not hypothetical at all. It is really right on target in terms of your saying everything is on the table. I just want to make sure there isn't a hidden agenda in terms of what is negotiable and not negotiable.

Now can I get direct response to the question. Is the MX, once deployed, negotiable?

Mr. DAM. It is negotiable in the sense that everything is negotiable. But I would like the opportunity to put that in context.

Chairman HATFIELD. Sure.

Mr. DAM. We obviously will want within any given limitation to keep our most capable nuclear armaments. The Soviets will do the same and everything can be negotiated about. But since they don't seem to be willing to come down, it seems to me we have to have in terms of the overall military posture our most capable weapons in our force. Therefore, although we certainly are not going to say to the Soviets there are certain things we won't even talk to you about, it seems to me unlikely that is going to be their negotiating posture.

Chairman HATFIELD. Well, then let me ask you this. Is it negotible at this time as an alternative to deployment with the Soviet Union?

Mr. DAM. Perhaps I misunderstood your question.

SOVIET LIMITATION IN ICBM'S TO PREVENT MX

Chairman HATFIELD. Let me ask you first of all what is the precise, or do you know what the Soviets' position would be at this moment in terms of agreeing to some kind of a limitation on their ICBM's that this question of deployment of the MX might be negotiable, that it could be used as a negotiating stock? Do you know if the Soviet Union has any position as to what limitations they are willing to accept on their ICBM's if we agree not to deploy the MX missile?

Mr. DAM. Well, the question hasn't been posed in the negotiations thus far in those terms. They are basically trying to negotiate in such a way that they can maintain their most capable force, and in fact nearly all of their force, and they will be able and would do it in such a way they could continue to modernize.

Chairman HATFIELD. Let me take the flip side. Do you have in mind what the Soviets would have to offer in order for us to agree not to deploy the MX missile?

Mr. DAM. Well, certainly much, much sharper reductions than they have even——

Chairman HATFIELD. I am not asking you to divulge classified information or strategy, I am just asking do you have a precise idea in mind in arms negotiation of what the Soviet Union would have to be willing to give up or reduce in order for us to agree not to deploy the MX missile.

Mr. DAM. Well, I couldn't speak on behalf of the administration on that point for a simple reason. We have a position in START. We don't know yet whether we are going to be able to deploy that missile. That depends on the Congress. Now if we are able to do that, that obviously will have an influence on how our position might evolve in the future of how we might respond to the Soviet

initiative. As to the whole nature of the process, no, we do not have such limitation.

Chairman HATFIELD. In other words, the question has not been posed to the Soviet Union?

Mr. DAM. No.

MX AS ARMS CONTROL BARGAINING CHIP

Chairman HATFIELD. And yet you tell us that the MX missile is an arms control negotiation advantages or enhancement of arms control?

Mr. DAM. Yes, for the very simple reason that unless the Soviets concede that we are willing and able to deploy, they have no reason to negotiate limitations. They can continue to deploy and we won't. It is as simple as that. Why should they negotiate?

Chairman HATFIELD. I am not so sure I see it quite that simply. You know the Soviets have expressed a willingness to forgo production of the new ICBM and perhaps they would even reduce some of the existing missiles as well in exchange for our withdrawing our plan for deploying a new ICBM.

Mr. DAM. It is conceivable, obviously. But we won't know until they are faced with that assurance.

Chairman HATFIELD. But the administration has not explored at this time through arms control discussions the option in relation to the MX missile?

Mr. DAM. We have put a position on the table which is subject to negotiation with them. We have not said, "If we are able to convince the Congress to go along with this new missile, what will you do?" We don't discuss hypothetical situations with them because we don't think it is an effective way to negotiate.

Chairman HATFIELD. But there certainly must be some kind of approach as far as a plan that you must have some kind of very obvious bargaining chip. We used to call it bargaining chip. I guess that is now bargaining leverage, if they are interchangeable. But surely they have some understanding of what our willingness is to bargain and we have a pretty good perception of what they are willing to bargain. We don't just sit there mum waiting for someone to break the silence.

Mr. DAM. Let me just say we have an arrangement with the Soviets that we have tried to keep, which is that what happens at the Geneva talks is confidential. However, let me say that while they have spoken a lot of words, they have left a lot of blanks in what they have been willing to talk to us about. Obviously, one of the things in their mind is what will be the strategic posture of the United States a few years from now, which is when this will really become effective, and so I think we will find out when they find out where we are.

Chairman HATFIELD. So, in other words, we have to deploy it before it is subject to discussions?

Mr. DAM. No, I think you have to show you are able to deploy before the Soviets will take you seriously.

Chairman HATFIELD. You mean between authorization and appropriation and actual deployment or when does that happen?

What is the ability to deploy? What is the criteria on making that determination?

Mr. DAM. Well, I think it has to do with having the legal ability to do so. Without the action of Congress, we don't have that.

Chairman HATFIELD. Is it a technical capability we have to demonstrate?

Mr. DAM. No, well—I think you have to show that the U.S. Government, which is both the executive branch and Congress, is prepared to go forward with deployment. I think that is the most important thing. I don't think there is a serious technical problem, assuming the decision is taken.

Chairman HATFIELD. If the Congress should approve this resolution releasing the money for deployment, is the administration then prepared to move quickly to see what they can negotiate with the Soviet Union before deployment actually takes place?

Mr. DAM. Oh, yes, we certainly are, and, as a matter of fact, we are trying to push the process at this time. We are having some resistance because we are not able to get a precise position from the Soviets because they are not really willing to move yet. So certainly we would expected to. After all, the first cannot be physically deployed and operational until about 1986.

Chairman HATFIELD. That is the first 100?

Mr. DAM. The first MX missiles, yes. So certainly we will be negotiating during that period very vigorously.

Chairman HATFIELD. It is very difficult for me to really understand just at what point or if the administration has in place a strategy to really raise this MX missile as a negotiating point. Until after we demonstrate capability, you say, but that is a rather imprecise kind of timeframe. If we deployed 100, does that mean we then have to deploy a second 100 if we haven't reached some kind of an agreement by then?

Mr. DAM. I would think that perhaps we are referring to General Scowcroft's statement this morning about the importance that we are not absolutely limited. But I certainly think that the decision taken by the United States Government as a whole to go forward would be decisive in negotiations. That is the most important step. Obviously the fact they are not willing to negotiate, we always have the possibility of deploying more. That certainly plays a role, but it is subsidiary to making the decision to do the deployment.

Chairman HATFIELD. Yet at this time that you have made this request to the Congress, you have precise numbers that you want to deploy, you have a basing mode, we have all these things in place that surround this particular question before this committee at this time, and yet it is still too hypothetical to really ascertain a Soviet position?

Mr. DAM. Well, if you would tell me what the probabilities are, I would say the Soviets could work on the probabilities. They have the possibility of just waiting and not having to do anything.

SOVIET POSITION ON PERSHING DEPLOYMENT

Chairman HATFIELD. I would think that the initiative could really be undertaken without waiting for the Soviet Union to take the initiative on that point because they have already indicated

their concern about the Pershing missile deployment and we seem to have gotten some kind of break, or at least Mr. Andropov has indicated as of last night a little more flexibility than he had in the past. You don't see this as an opportunity to maybe break through another barrier?

Mr. DAM. Well, let me say with regard to the INF or Pershing missile issue, the situation is a little different there. The Soviets have thus far taken the position that the only control agreement that they would be willing to negotiate is one which is zero for the United States. While we will look very carefully at what Andropov is proposing when it is tabled in Geneva so we can see what it is, nevertheless, I don't see yet any willingness on their side to come down to equality with the United States. What they are saying is they should be able to deploy but we should not. That is the whole problem with the British and French systems. The Soviets want to talk about the Pershing because they think it is possible that they might be able to disrupt the deployment schedule without actually agreeing to anything. We will see whether they come to the table in Geneva with a reasonable proposition.

Chairman HATFIELD. Is that your assessment of Mr. Andropov's proposal as of last night?

Mr. DAM. I don't think we have an assessment. We have a statement which is calculated in beautiful ambiguity. But the talks are going to start in a couple weeks in Geneva, and presumably they will table that proposal and they will know what it means. There seems to be some possible movement in taking more account of warheads and less of launchers, and, as the Commission indicated in its report, that is a good thing. Certainly we think that is a good thing. But we don't see any basic movement on the basic question of moving forward an agreement based on equality between the United States and the Soviet Union in these bilateral talks.

Chairman HATFIELD. Senator Huddleston.

SOVIET CONCERN OVER MX

Senator HUDDLESTON. Mr. Secretary, I would like to pursue a little further this question of the degree of inducement that 100 MX missiles in Minuteman silos will provide. Maybe you can tell us whether there is any indication at all from the Soviet Union that given the developments that have already occurred which have been of some concern to them—the development of sea-based launchers, air-based launchers, the Pershing, the Trident II, the ATB—what added incentive can there be for us to deploy 100 MX missiles which the military people seem to think will bring marginal enhancement to military effectiveness. Do you have any information that indicates that they are that concerned about the MX missile?

Mr. DAM. I think the fact that they are not moving from their initial position indicates they are waiting to see what happens. But they haven't told us—they are not in the business of providing us guidance on their own negotiating tactics.

Senator HUDDLESTON. I understand that. And you pointed out that until there is an actual deployment, on the verge of deployment, they are not addressing the question. I think the chairman

indicated in the case of the Pershing, in the case of the cruise missile, they began long before those missiles were deployed to begin to make counterproposals and suggestions and moves, even threatening statement , to try to eliminate their deployment. In the case of cruise and SALT II negotiation, they bargained very hard for very strict limitations on the use of the cruise. Now if they felt MX was that threatening to them, how come they are not making some statements about it? I haven't found any evidence that they care about the MX.

Mr. DAM. Well, I think that what you point to as history shows exactly that it is when they see something that is going to go forward, not just might go forward, where they see the United States firmly behind something, then they do take it seriously. That was the history of the ABM. That was the history in the European missiles. And I think that will be the history now.

Senator HUDDLESTON. There was still some congressional action necessary in deployment of the Pershing II.

Mr. DAM. That is correct. They didn't come to the table until NATO took its decision, and then they reluctantly staggered to the table. Now they have yet to agree to a proposal which would be considered at all reasonable which is based on any deployment of these missiles until they see it is acutally going to happen, and that is what the whole struggle in Europe is about.

Senator HUDDLESTON. It is not that they have to concentrate on MX?

Mr. DAM. They have concentrated on it, but they want to see if they achieve the reductions, the elimination of these missiles for nothing.

ADMINISTRATION REACTION TO ARMS CONTROL ASSURANCES

Senator HUDDLESTON. Now Senators Nunn, Cohen, and Percy have written the President requesting that certain arms control assurances be made in connection with the MX. Are you aware of any adminstration reaction to this at this point?

Mr. DAM. Well, there are several different things in their letter. For example, they talk about guaranteed build-down. We are certainly looking at that very carefully. It has a lot of attractive qualities. It has some problems in it, some technical problems, and one that is perhaps technical but perhaps general, and that is if the effect is to build us down from where we are in the ICBM area, but leaving the Soviets where they are without the need for modernization, then we are in an asymmetrical position to a disadvantage. Beyond that, you have to say to one or two what is a new systems opposed to an additional system that is being deployed. There are a lot of problems, but we are interested in the concept.

Senator HUDDLESTON. It is worth considering.

Some have also suggested that perhaps we could devise a provision in the authorization/appropriation that would require that the Soviets do something specific toward a reduction, not just begin bargaining, but to specifically state that they would do something relative to decreasing their arsenal; if they did that during the period of authorization and actual deployment, that the missile

would be brought down. Is that any possible kind of useful approach?

Mr. DAM. Well, Senator, I really don't think so, not because I don't think the idea is an interesting idea, because I don't think that in a poker game like these negotiations in Geneva it is reasonable to ask our negotiators to negotiate on two sides at once is what it boils down to. I don't think we can be negotiating with ourselves about conditions and tradeoffs, and so forth, and at the same time we are trying to negotiate in Geneva. I don't think that is going to maximize the American national interest.

Senator HUDDLESTON. If we withhold the MX provided they do something worthwhile for us.

Mr. DAM. I am sure it is a situation they could exploit effectively.

Senator HUDDLESTON. Well, it seems to me that a crucial question we have to be concerned with is how to induce the Soviets to move toward the reduction of nuclear arms. But if we spend $16 billion just on the guess or gamble that is going to induce them, we may wind up with 100 MX missiles that have not appreciably increased our own effectiveness as a deterrent or as a military strategic position. In that case, we will have made a pretty sorry gamble.

Chairman HATFIELD. Thank you Senator.

Before I call on Senator Rudman, Mr. Secretary, I would like to thank you again for your flexibility that you have indicated here by being able to remain for these questions. Therefore, I think we will bring the hearing to a close following the questioning of Senator Rudman. And I want to express very strong appreciation to Admiral Howe for being the backup for you, and to say to Mr. Lehman, since we are having Secretary Weinberger tomorrow, I think it would be just as well to put the questions to him, and again we thank you for your time this morning. I hope it has not been a wasted time period.

All right, Senator Rudman?

Senator RUDMAN. Mr. Chairman, thank you very much.

EFFECT OF MX DEPLOYMENT ON NEGOTIATING ABILITY

Mr. Secretary, I am going to limit my questions narrowly to the area of whether or not the deployment of 100 MX missiles will enhance our strategic negotiating ability is in fact a valid one. I don't think that that is necessarily an abstruse kind of issue to examine. I think it can be examined with some hardcore logic. I would like to go through an exercise with you so we can at least agree or disagree. I have not reach a conclusion on the validity of that claim, but I have not heard too much that has moved me in a positive mode.

Mr. Dam, let's see if we can agree on a few things. Would you agree with me that everyone who has testified on this issue and the report itself indicates clearly that the Soviets enjoy a substantial superiority over the United States in land-based ICBM's?

Mr. DAM. I agree with that.

Senator RUDMAN. Would you further agree with General Scowcroft, with certainly Secretary Weinberg, and with the other witnesses that have been up on the Hill on this issue that the United States enjoys what can only be called a vast superiority at this

time in submarine-launched ballistic missiles and air-launched cruise missiles?

Mr. DAM. Well, we certainly are technologically. They have more sea-based missiles than we do.

Senator RUDMAN. I understand what they have and what we have. But in terms of deployment of the full Trident force, I don't think too many people—I would like to bring the Chief of Naval Operations over here. I think he would testify we have a very substantial superiority in the sea base at this time.

Mr. DAM. I was trying to give some nuance to that question because it depends on what you focus on most. Certainly we do have superiority in a technological sense.

Senator RUDMAN. B–52's, which I just reviewed in operation out at Grand Forks, with the B–1 coming on, which I strongly support, putting the Stealth aside, even with the Soviet movement toward strategic air capability, everyone on our side agrees, and I expect they do also, that we enjoy a rather substantial lead in that area.

Mr. DAM. If we continue to carry out our plans, we will maintain a very effective force.

Senator RUDMAN. Now if those facts are all true, let me give you my supposition on where I have a problem. The administration comes over here and says to us that one of the key reasons to vote for this proposal is because it is a substantial bargaining chip. Mr. Secretary, if you were a Soviet planner, what incentive would it be to you to reduce your land-based ICBM force in return to the United States not to deploy MX when the superiority of the other two legs remains strong and firm with no foreseeable change in the future? That is the point I don't understand.

Mr. DAM. I think the emphasis should be on your term, "the near future," because we see how long it takes to deploy a weapon. We are talking about a new ICBM that could be perhaps deployed in 1993, if there were no slippage and if the funds were always voted on in time and if there were no controversies, and so forth. We are talking about deployment today of a missile we started planning for in 1966. So while it is true that our submarines are currently invulnerable, if you are not prepared to modernize our ICBM force, and given there are always problems about the penetration of the bomb level force, we are to a certain extent putting all our eggs in one basket by that strategy.

Senator RUDMAN. You certainly cannot downgrade the power of the Minuteman III we have deployed in the country, we assume we wouldn't be able to launch and the same applies to the MX, certainly you could not come to us today and say that our land-based force has no credibility at all.

Mr. DAM. No, in the near term. But I wanted to emphasize the crucial condition in your question.

TOTAL SOVIET DEPLOYMENT

Senator RUDMAN. Now let's talk about current Soviet deployment. Let's not even talk about the PL–4 and PL–5 which they would be authorized to deploy under SALT. At the present time they have 308 SS–18's deployed, each carrying 10 warheads. That is 3,080 RV's. Just speaking to those SS–18's, as a skilled negotiator,

Mr. Dam, what incentive as a Soviet negotiator would you have to make any reduction in that SS–18 force just because the United States is about to deploy 100 more vulnerable land-based missiles? Granted they have 10 warheads rather than 3, but what is the incentive?

Mr. DAM. First of all, of course, it is the whole program we are endorsing. Beyond that, with respect to the narrow question of the MX by itself, the fact is that to the extent that those forces would survive, and I will go through that with going through the same logic General Scowcroft used, they are much more capable, they are much more accurate, they have higher yield, and each missile has over three times as many warheads that would survive with greater effectiveness.

Senator RUDMAN. Assuming they have a chance to fire?

Mr. DAM. Yes.

Senator RUDMAN. That is a very big assumption, along Soviet doctrine.

Mr. DAM. I am not sure why you say that. Obviously over time, with increasing Soviet accuracy, increasing Soviet numbers, that perhaps becomes greater, but that is the reason for the follow-on program.

Senator RUDMAN. My comment was directed to the fact that Soviet doctrine, and I say this not facetiously, there is not an association of people in the Soviet Union publicly telling the Soviets what their strike capability ought to be. If they read that document they publish, the military people have long thought under certain circumstances first strike was possible. I cannot believe an American President launching first strike, so I have to assume the Soviets feel very secure in their land-based force because they feel they can get off while we cannot.

Let me go to another point and wind it up here.

Yesterday, Admiral Turner, who certainly is a man of substantial reputation, made a very interesting point, I guess dramatizing this point. He was essentially saying what difference does it make to Mr. Andropov, if a 1 megaton warhead is fired at his Rose Garden or the Kremlin from West Germany with a Pershing or from a hole someplace in North Dakota, the impact is the same, except the one fired from West Germany has more destabilizing effects because it has shorter travel time. Why not merge in terms of our thinking the great leverage that our Pershing deployment in Western Europe will give us as opposed to looking at that as intermediate? It may be intermediate in terms of absolute range. It certainly is final and conclusive in terms of its ability to reach target. Why not look at that as being an important bargaining chip, I am talking now land-based missiles, for reduction?

Mr. DAM. I think there are two very easy answers to that and there is a more serious, deeper answer. The first easy answer is it can't reach the Rose Garden.

Senator RUDMAN. Pershing II can reach most of what he calls his Rose Garden. Mr. Dam, I have seen the target. If I were them, I would be plenty fearful.

Mr. DAM. Well, it can't reach, for example, the ICBM bases.

Senator RUDMAN. It can reach their command and control facilities.

Mr. DAM. In any event, I am trying to respond to the question you put originally.

Second, there are only 108 warheads. That is not a very credible threat to their ICBM force. And I think the larger point, however, is what follows from the earlier description of the testimony. He was recommending we at this point essentially merge the INF and SALT negotiations. I think that would be a great mistake. The reason I think it would be a great mistake is every critic of deployment would say, "ah ha, now you have really come up with a clever one." What you are going to do is get this thing into negotiations that are so complicated they can't be completed by next fall and it is just an excuse to deploy, it is not a serious proposal. And that is the larger and deeper reason why I think certainly at this point any attempt to bring those two negotiations together will be counterproductive.

REDUCTIONS FROM STANDPOINT OF STRENGTHS

Senator RUDMAN. My final, brief question, Mr. Dam, from a negotiating standpoint is, don't you think we have a better chance of making progress in the START if we say to the Soviets we will reduce from our strengths, this is not our weakness, and you reduce from your strengths and not weaknesses, and let's try to reach parity?

Mr. DAM. Well, we are proceeding on that approach. We are, for example, putting a lot of emphasis on throw weight in an effort to deal with some of their heavy, most capable missiles. They are not very responsive to that. And I certainly think that is important to negotiations.

Senator RUDMAN. Thank you.

Chairman HATFIELD. Thank you, Senator.

Thank you again, Mr. Secretary, for your appearance here today. And I want to thank the Senator from New Hampshire and the Senator from Kentucky, Senator Huddleston, for their participation as well.

SUBMITTED QUESTIONS

We will be submitting additional questions to you, Mr. Secretary to be answered for the record. They will be inserted in the record at this point.

[The following questions were not asked at the hearing, but were submitted to the witness for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

1. In your view, were the verification procedures incorporated in SALT I and SALT II adequate to protect U.S. interests?

With respect to SALT II, I believe that some of the provisions present significant verification problems. The answer is clearly no. As you may be aware, the Senate Armed Services Committee itself concluded after extensive hearings that many of the provisions of the treaty cannot be verified.

SALT I was a much less ambitious agreement than SALT II and didn't deal with such important questions as defining what constitutes a heavy ICBM. Therefore it was somewhat easier to verify. Even so, there were some difficulties in verification.

The Reagan Administration is committed to the principle of effective verification as a fundamental requirement for effective arms control. For example, we are seeking rigorous verification requirements in the START and INF agreements currently being negotiated, and we have proposed negotiations to improve the verification provisions of the Threshold Test Ban and Peaceful Nuclear Explosion Treaties.

2. In light of the U.S. predisposition to believe the Soviet Union is abiding by arms control agreements when classified evidence indicates violations may have occurred, do you believe it is in our national interest to continue to rely upon national technical means as the primary tool for verification of Soviet compliance with arms control agreements?

The Administration is currently examining Soviet compliance with the various arms control agreements we have signed. There is no "predisposition" in this review; it consists of a careful and dispassionate exploration of Soviet activities as they relate to the arms control obligations which the USSR has undertaken.

As you know, as a result of an extensive review of US arms control policy, the Administration concluded in 1981 that effective arms control may indeed require establishing cooperative measures beyond national technical means of verification. We are currently discussing this issue with the USSR in the START and INF negotiations.

3. What level of evidence do you believe the President must present to the American people to convince them that there have been serious violations of arms control agreements by the Soviet Union? Proof beyond a reasonable doubt? Clear and convincing evidence?

The President is committed to ensuring that the US is aware of whether or not the USSR is living up to its arms control obligations. When there has been evidence suggesting the possibility of Soviet arms control violations the US has pursued these matters vigorously through diplomatic channels and, in the case of strategic arms agreements, through the

US-USSR Standing Consultative Commission. Where the evidence has been ambiguous we have sought clarification. You may be sure that when analysis of the evidence shows that a violation has taken place, the President will not hesitate to say so.

QUESTION 4

How would you characterize U.S. media and public opinion reaction to State Department charges of Soviet violations of the 1925 Geneva Protocol on lethal chemical weapons and the 1972 Biological and Toxin Weapons Convention?

(NOTE: The media and pollsters, along with the general public, tend to use the phrase "Yellow Rain" to describe the entire range of chemical and biological weapons that the U.S. Government charges the Soviet Union and its allies with using in Afghanistan and Southeast Asia.)

EDITORIAL REACTION

Perhaps the clearest illustration of recent media reaction to U.S. charges is editorial responses following the release of Special Report 104 on Nov. 29, 1982.

Thirty-seven major U.S. dailies commented (Dec. 1-23) on the report and the information it contained. A large majority (32) agreed that the U.S. case now was well-documented. Six papers, however, felt that the case was still "not ironclad" (Boston GLOBE) but "added considerable strength to the charge" (Dayton DAILY NEWS). Others suggesting that the evidence was not conclusive but nevertheless useful were the Des Moines REGISTER, Phoenix REPUBLIC, Houston POST, and New York TIMES.

Five papers urged the U.S. to continue to publicize its findings and to press for international condemnation (Buffalo EVENING NEWS, Tampa TRIBUNE, Pittsburgh POST-GAZETTE, San Francisco CHRONICLE, Los Angeles TIMES). The Hartford COURANT said that "Each time it gets a little bit harder for Moscow to deny culpability."

PUBLIC OPINION POLL RESULTS

According to an August 1982 Gallup Poll (the only poll on the subject available), about one-fifth of the U.S. public could be said to be "informed" about the "Yellow Rain" issue. Even though nearly two-fifths of those polled said they knew what Yellow Rain was and were aware of U.S. charges, only 20% actually knew that it referred to chemical or biological weapons.

Following are some questions used and the results of the Gallup Poll:

Q.: Have you ever heard the term "Yellow Rain"?

37% answered "Yes" (20% actually knew it to be a chemical or biological agent); 63% answered "No".

Q.: Which countries have engaged in chemical and biological warfare since World War II?

The following countries were named by the cited percentages of respondents: Soviet Union (22%), Vietnam (North Vietnam) (16%), United States (11%), Afghanistan (7%), Other Communist Country (4%), Other Non-Communist Country (3%); Don't Know (6%).

Q.: The U.S. Government has accused the Soviet Union and its allies of using a form of biochemical warfare called Yellow Rain in Afghanistan, Laos, and other parts of Asia. Are you aware of these accusations of not?

39% claimed to be aware; 61% did not.

5. How would you characterize the level of proof of Soviet violations of the 1925 Geneva Protocol and the 1972 Biological Weapons Convention the State Department has assembled and presented to the world community?

The full body of evidence and information the U.S. has collected and analyzed provides a conclusive basis on which to reach the determination that chemical and toxin weapons are

being used by the Soviet Union and its allies in Afghanistan and Southeast Asia. I would, therefore, characterize the "level of proof ... assembled and presented to the world community" by the United States as unequivocal.

6. In light of world reaction to those charges, do you believe that evidence consisting of the products of national technical means of verification is politically sufficient to allow the U.S. to hold the Soviet Union to the terms of any arms control agreement we may negotiate with them in the future?

National Technical Means (NTM) of verification are systems which can be used to monitor only certain activities of states in regards to their obligations under arms control agreements. (In the case of monitoring chemical weapons use, in fact, NTM alone is of extremely limited value.) Further neither NTM, nor other means of verification, can force the Soviet Union, or any other state, to comply with the terms of a treaty or guarantee arms control compliance. Indeed, no verification arrangements or treaty provisions can. Neither can they prevent a state from violating a treaty once that state has made a deliberate decision to do so.

Effective Verification measures, can, however, help assure other adherents to a treaty that they can uncover violations in sufficient time to take the actions necessary to safeguard their security and prevent the violator from gaining any significant advantage. This, in turn, serves as a deterrent to potential violators. If potential violators know that it is highly probable any or all of the series of activities needed to acquire a prohibited weapons capability will be uncovered before they are in a position of advantage, it will be a major disincentive to trying such a course.

If, at the negotiating table, the Soviets can be made to accept strong and effective verification arrangements that would enable us to uncover violations in time to prevent them from posing any real threat, then we will have the politically sufficient basis we need to conclude future arms control agreements with them.

7. Do you believe our US Intelligence Community would willingly allow a President to disclose and discuss in diplomatic or public forums the specific evidence of Soviet arms control agreement violations if that evidence were the product of national technical means and would tend to reveal very sensitive intelligence sources and methods?

The Intelligence Community is consulted on all matters which could have an impact on sensitive intelligence sources and methods. Generally, when a policy decision is based on sensitive information, the Community is able to recommend a course of action which would allow the President to disclose appropriate information but which does not jeopardize intelligence sources and methods.

8. Please explain how you believe U.S. leaders can muster public support behind charges of Soviet violations of arms control agreements in the face of concerted political opposition and skeptical media analysis without the use of specific evidence proving such violations.

Were the United States to determine that a Soviet violation of an arms control agreement had taken place, there are a number of steps the Administration could take in presenting the case to foreign and domestic publics. The type of evidence made public would be determined in part by the nature of the agreement and violation. The present administration has, for example, spoken out strongly on Soviet use of biological and toxin weapons. It is difficult to predict whether the protection of intelligence sources and methods or other considerations would prevent or constrain the release of evidence concerning such a hypothetical violation.

9. Is, in your view, the building of a public consensus that a serious arms control violation by the Soviet Union has occurred a prerequisite to an adequate U.S. response to such a violation?

Public support is an essential ingredient in effective arms control. I am confident that in any situation in which there is sufficient evidence to support a conclusion that the USSR has violated an arms control agreement, the Administration can count on public support for US efforts to address that violation.

10. In your view, has the Soviet Union abided by the letter and spirit of SALT I, the ABM Treaty, and SALT II?

Both we and the Soviets continue to observe the limits on strategic systems set by the SALT I Interim Agreement. With regard to SALT II, neither the Soviets nor we have taken any active measures to implement certain provisions of that agreement. For example, the Soviets have not initiated reductions of strategic systems to the 2,250 level dictated by SALT II nor have they claimed that they are doing so. We do not view this fact as undercutting existing agreements, however, because the additional systems can be dismantled later as part of a START agreement.

The US does have serious concerns, however, regarding Soviet compliance with certain other provisions of SALT II. For example, as the President has noted, we are currently evaluating recent tests of the new Soviet ICBM to determine their consistency with a number of SALT II provisions.

11. Do you believe the Soviet Union has employed deceptive negotiating practices in negotiations with the U.S. over arms control agreements?

It is not clear what is meant by "deceptive negotiating practices." It goes without saying that neither side in a

negotiation reveals to the other the details of its negotiating strategy. As a closed society the Soviet Union enjoys certain inevitable advantages when it comes to negotiating. They know with reasonable certainty our future military plans, while we have to rely on intelligence information, supplemented by whatever they choose to tell us, for clues about theirs. The Administration is committed to achieving arms control agreements whose provisions are effective and enforceable on their own merits, regardless of Soviet negotiating strategy.

12. If the Soviet Union were to stage a slow breakout from the limits of SALT II under the cover of a well-designed strategic deception plan incorporating a propaganda peace offensive directed at Western public opinion and elected officials, do you believe we would obtain timely, unambiguous indications of such a breakout from our present treaty verification procedures?

Yes. The SALT Agreements are monitored very carefully and strictly. Any possible activity which is considered ambiguous is studied and brought immediately to the attention of the policymakers by the Intelligence Community.

13. How well do you believe our national leadership would do if it received ambiguous intelligence information indicating a possible Soviet decision to stage a strategic arms control breakout which contradicted a predisposition to believe public Soviet protestations of strict adherence to arms control treaties? Are we capable of reacting decisively under these conditions?

The policy of this Administration has been and will continue to be to objectively explore and thoroughly clarify any ambiguous situation which gives rise to concern over any aspect of any arms control treaty. This policy is not subject to predisposition toward any conclusion.

14. If we have no open strategic weapons production lines at the time we finally conclude the Soviet Union has decided to break out of strategic arms control limits in an attempt to achieve a dominant level of strategic superiority, how long would it take us to open a production line and begin fielding new weapons systems in sufficient numbers to restore the balance?

As you know, the President has proposed a comprehensive modernization program which is designed to rectify imbalances between U.S. and Soviet forces. This program is now well underway, with some weapons now in production, such as the air launched cruise missile and the Trident submarine. Production of others will begin over the next few years, such as the B-1 bomber. How long it would take to increase production rates for these systems would have to be evaluated on a case-by-case basis.

Should the Congress fail to support production of the MX missile, at some future time the MX could be restarted, although with substantial delay to the program. The Department of Defense would have to provide estimates of how long such a

restart would take. Such a delay would have serious consequences for our strategic nuclear deterrent and current arms control negotiations.

15. In your view, would the danger to our national security a well-disguised and competently executed Soviet strategic arms control limits breakout poses be tolerable, given a nuclear freeze agreement which forces us to terminate our strategic modernization program?

The Administration has made quite clear its view that a comprehensive nuclear freeze would not be in our national security interest. A freeze would preserve the Soviets in a position of advantage and would prevent the maintenance of a credible nuclear deterrent. It would also make it more difficult for us to resume production of strategic nuclear weapons should that become necessary.

16. What role do our political leaders' predispositions play in their evaluation of ambiguous intelligence information regarding Soviet actions?

One of the strengths of our political system is that it tests various points of view in rigorous discussion and debate. When political leaders make policy decisions based on the available intelligence, those decisions are the result of an interagency process which carefully addresses and considers disparate views and ideas and subjects them all to critical examination.

17. How vulnerable are we to the same sort of mistake the Israeli leadership made in evaluating intelligence information on Egyptian plans prior to the 1973 war? If faced with a strategic deception plan designed to shape our leaders' expectations, is our intelligence evaluation process objective enough not to be captured by officials who desire to please their bosses by reporting what they want to hear?

Our intelligence evaulation process is extensive, involving many separate agencies and often including close participation with our Allies. In fact, the Intelligence Community's products (such as National Intelligence Estimates, Interagency Intelligence Memoranda, the SALT Monitoring Report) meticulously reflect the full range of interpretation and differing views within the Intelligence Community.

COMMITTEE RECESS

Chairman HATFIELD. Tomorrow we will have the Secretary of Defense, Mr. Weinberger, and the Chairman of the Joint Chiefs of Staff, General Vessey, at 9:30 in this room.

The meeting is adjourned.

[Whereupon, at 11:50 a.m., Wednesday, May 4, the committee was recessed, to reconvene at 9:30 a.m., Thursday, May 5.]

SENATE CONCURRENT RESOLUTION 26, A RESOLUTION TO APPROVE FUNDING FOR THE MX MISSILE

THURSDAY, MAY 5, 1983

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The committee met at 9:35 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Mark O. Hatfield (chairman) presiding.

Present: Senators Hatfield, Stevens, Andrews, Abdnor, Kasten, D'Amato, Rudman, Specter, Domenici, Stennis, Inouye, Huddleston, Leahy, DeConcini, and Bumpers.

DEPARTMENT OF DEFENSE

SECRETARY OF DEFENSE

JOINT CHIEFS OF STAFF

STATEMENTS OF:

HON. CASPAR W. WEINBERGER, SECRETARY OF DEFENSE
GEN. JOHN W. VESSEY, CHAIRMAN, JOINT CHIEFS OF STAFF

OPENING STATEMENT OF CHAIRMAN HATFIELD

Chairman HATFIELD. The hearing will come to crder.

This is the third and final day of hearings before the Senate Appropriations Committee on Senate Concurrent Resolution 26, a resolution of approval for the President's plan to deploy 100 MX missiles in existing Minuteman silos.

On Tuesday, we heard testimony from independent military and security specialists who were critical of the Scowcroft Commission's recommendation, Adm. Stansfield Turner and Dr. McGeorge Bundy. Yesterday, we heard arguments from General Scowcroft and Under Secretary of State Kenneth Dam who felt the MX was necessary for our START negotiations with the Soviets.

Today, we have with us the Honorable Caspar Weinberger, Secretary of Defense, and General John Vessey, Chairman of the Joint Chiefs of Staff. Both will provide testimony on the deployment of the MX and the implications for our arms control talks in Europe.

Gentlemen, we thank you for being with us this morning. I know you spend many hours on the Hill. There are times when I wonder how you get your work done down at the Pentagon and elsewhere, but we are grateful for the kind of willingness that you have dem-

onstrated to appear before committees in the House and Senate, and I would welcome you here this morning.

PREPARED STATEMENTS

Your entire statements will be placed in the record, and if you care merely to highlight or summarize your statement, then we will get to the questions. We have a procedure where we want to hear from both of you first in your formal statements and then we limit our round of questions to 10 minutes per member. And then if there are further questions, there would be a second round. We are hopeful we can get you out of here in an expeditious manner and let you get back to your other duties.

So, Mr. Secretary and General, thank you again and welcome.

[The statements follow:]

PREPARED STATEMENT OF HON. CASPAR W. WEINBERGER
SECRETARY OF DEFENSE

Mr. Chairman, thank you for this opportunity to discuss the President's plan for revitalizing the ICBM leg of our strategic TRIAD.

This is not my first visit to talk about the need to update our ICBM forces. Nor am I the first Secretary of Defense to raise these issues before this distinguished committee. Four Presidents, six Secretaries of Defense, and a majority of the members in several sessions of Congress all have concluded that we need to modernize our ICBM force.

The members of the President's Commission on Strategic Forces have done us all a great service, and not just because they have presented an eminently reasonable, and achievable, proposal for modernizing our ICBMs. They have also reminded us that there is a long-standing, bipartisan consensus about three facts. First, that the United States pursues peace and protects its freedom and the freedom of its allies through a joint strategy of deterrence and arms control. Second, that deterrence depends on retaining a multiplicity, and more specifically a TRIAD, of strategic forces, including intercontinental ballistic missiles. And third, that in view of actions taken by the Soviet Union over the last decade and a half, we must take steps <u>now</u> to ensure the effectiveness of that TRIAD and in so doing not only maintain deterrence but also improve the prospects for genuine, mutual, and significant reductions in nuclear weapons.

Before discussing the President's recommendation for modernizing the ICBM force, let me review the reasoning that lies behind this consensus about American strategic policy.

Since the end of World War II and the dawn of the atomic age, the United States has maintained peace and preserved its freedom, and that of its allies, by means of an inherently defensive policy -- deterrence. This policy, and the strategic capability to back it up, serves as a clear indication to potential aggressors that the West has the will and the means necessary to resist aggression. By maintaining the ability to retaliate against a potential aggressor in such a manner that the costs we will exact will exceed substantially any gains he might hope to achieve through aggression, we can prevent any aggressor from coming to believe that he could profit from or win a nuclear war.

We, for our part, are under no illusions about the consequences of nuclear war. We know there would be no winners in such an exchange. But this recognition on our part is not enough to maintain deterrence. The Soviet leadership must understand this as well. The President's Commission on Strategic Forces made this point eloquently in their report.

> "Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what would deter ourselves. Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to determine, as best we can, what would deter them from considering aggression, even in a crisis -- not to determine what would deter us."

Unlike the United States, the Soviet Union seems to believe that under certain circumstances a nuclear war could be fought and won. Today we see that the number, the explosive power, and

the accuracy of Soviet nuclear weapons are far greater than would be needed simply to deter attack. In addition, the Soviets have developed a refiring capability for some of their larger ICBMs, which could allow them to reload their delivery systems several times. They have given us indications that they think they could fight a protracted war by hardening their silos and protecting key targets with elaborate air defenses. Their writings, military doctrine, and exercises all emphasize the kind of nuclear warfighting policy which we in the United States have rejected -- and which we must deter. We must, therefore, make sure that the Soviet leadership, in calculating the risks of aggression, recognizes that an effective American response exists, and understands that, consequently, there can be no circumstance where the initiation of a war at any level would make sense.

To this end, we have maintained over the last two decades a strong and interdependent force, known as the TRIAD, which consists of land-based intercontinental ballistic missiles, sea-based ballistic missiles, and manned strategic bombers. This multiplicity of forces provides three significant benefits.

First, each of the strategic components of the TRIAD acts in concert with the others to complicate Soviet planning, making it more difficult for the Soviet Union not only to plan and execute a successful attack but also to defend against retaliation.

Second, each of the legs of the TRIAD acts as a hedge against a possible technological break-through that could threaten the viability of any single strategic system. By maintaining a TRIAD we force the Soviet Union to disperse their resources among three components, preventing them from concentrating their considerable resources on defeating two or only one U.S. strategic system.

Finally, only a TRIAD of three unique systems can provide us with all the elements necessary to provide a strong, secure deterrent. The strengths of each system not only complement the strengths of the other two but also compensate for their weaknesses. To deter successfully all types of nuclear attack, our forces as a whole must possess a number of characteristics and capabilities -- including survivability, prompt response, mission flexibility and sufficient accuracy and warhead yield to retaliate against hardened Soviet military targets. No single weapons system can incorporate all of these capabilities. Submarines are less vulnerable, but less accurate. Bombers are accurate, and retrievable, but they are much slower. ICBMs are easier to command and control, faster, and more accurate, but they are more vulnerable than submarines and, once launched, irretrievable. But all three systems together can incorporate all those elements necessary to deter against all types of attack.

For many years it was our good fortune to possess a TRIAD whose effectiveness could be assured well into the future. Unhappily, due to the massive, and largely unmatched, strategic build up that the Soviets have sustained since the 1960s, those days are gone. That build up has created su bstantial vulnerabilities in our strategic TRIAD which in turn have altered the strategic balance and reduced the effectiveness of our deterrent capability.

Over the past two years the President has instituted, and the Congress has supported, a number of initiatives to rectify the TRIAD deficiencies this build up has created, including production of the Trident submarine and development of a new, more capable SLBM, the D-5; production of the air-launched cruise missile, development of the B-1B and 'Stealth' bombers; improvements in the U.S.-Canadian Air Defense network; and

improvements in the effectiveness and reliability of our command, control, communications and attack warning capabilities. I know this committee shares our conviction that such a strategic modernization program is vital to preserving deterrence and enhancing the prospects for arms reduction.

But one very serious weakness in our TRIAD has yet to be resolved -- the modernization of the ICBM force. The United States made a conscious choice during the 1970s to restrict its nuclear weapons developments so as not to present the Soviet Union with a first strike threat. However, the Soviets showed no such restraint. During the 1970s the Soviet Union deployed more than 600 powerful SS-18 and SS-19 ICBMs with nearly 5,000 highly accurate warheads; at the same time they hardened their missile silos and key command and control facilities to resist attack. These Soviet developments have simultaneously endangered the survivability of our ICBM force, and substantially reduced the retaliatory effectiveness which lies at the heart of our strategy of deterrence.

Without a viable ICBM force our TRIAD would lose several qualities that are crucial to deterrence: extremely high peace-time readiness rates, rapid and reliable communications with command authorities, and prompt counter military capability.

But, even more important, indeed at the heart of the current U.S.-Soviet strategic force imbalance, is the Soviet monopoly of prompt hard target kill capability. This gives them a twofold advantage over the United States. First, it enables the Soviets to launch a very high confidence first strike attack on our land-based ICBM, while expending only one third of their ICBM force in the process. The large store of remaining ICBMs would then enable them to divert weapons to other essential targets in a first-strike attack and still

maintain a large and effective reserve force to conduct follow-on attacks. Second, the fact that we lack a prompt retaliatory capability against very hard targets allows Soviet planners to consider the possibility that, for the crucial first few hours of a nuclear conflict, the bulk of their ICBM force and supporting command and control structure would remain largely immune to U.S. retaliation. This would eliminate one of the major sources of uncertainty that is such an important element of deterrence -- the unpredictable effects of U.S. retaliation on Soviet war plans. Without this crucial uncertainty exerting an influence on Soviet war planners, their confidence in their ability to fight and win a nuclear war is reinforced.

This development is too dangerous to be allowed to continue unchallenged. If we do nothing, we will face the very real danger that the Soviets could at some point come to believe that they could use, or blackmail us by threatening to use, nuclear forces to gain their military or political ends.

Because the problems of the ICBM leg of the TRIAD are essentially two-fold -- retaliatory effectiveness and survivability -- we must seek a solution that answers both concerns. Last November the Administration recommended deploying the Peacekeeper missile in a closely spaced basing mode, which would take advantage of the fratricide phenomenon produced by attacks on closely spaced super-hardened ICBM silos. Congress, as you know, directed us to study further the question of basing and deployment. To fulfill this requirement, the President established an independent, bipartisan Commission on Strategic Forces made up of distinguished experts and former Government officials and chaired by former National Security Advisor, Brent Scowcroft. The President directed the Commission to examine the broad range of strategic modernization issues including basing alternatives to CSB, ICBM alternatives to the Peacekeeper,

and air- and sea-based alternatives to a modernized land-based ICBM force. Over the last several months the Commission thoroughly studied these alternatives and last week presented its report to the President; a report that, I think all will agree, equals in every respect the expectations of excellence that such a distinguished body of experts naturally engenders. It is a report that has won the strong support of the President, his National Security Advisor, the Joint Chiefs and me. In addition to endorsing the President's strategic modernization program, the report addresses the two weaknesses of the ICBM leg in a phased approach.

To solve the problem of retaliatory effectiveness the plan calls for a limited deployment of 100 Peacekeeper missiles in Minuteman silos which will reestablish the hard target capability necessary to maintain deterrence. By deploying the Peacekeeper missile we will immensely complicate any attack the Soviets might plan and, by threatening their remaining ICBM force, decrease their confidence that an attack might succeed. As the President's Commission points out "Soviet planners would have to account for the possibility that Peacekeeper missiles would be available for use and thus they would help deter such attacks." Thus the lack of retaliatory effectiveness in our current ICBM force is a relatively easy weakness to overcome and the Peacekeeper can begin to accomplish this in 1986 and finish the job in 1989. Meeting this schedule is contingent on prompt action by the Congress in providing necessary authorities and approvals.

The President's modernization plan also spells out an approach to enhancing survivability. However, because this aspect of the problem is more complicated, the solution is necessarily more difficult. I can think of few national security issues that have been so intensively and exhaustively examined as Peacekeeper basing. The search for a survivable basing mode

has preoccupied political leaders of both parties, as well as the American people for nearly a decade. Although we frequently have embraced different solutions to this problem, we all, nevertheless, shared the belief that if we looked long and hard enough, a single, perfect solution would be revealed.

By now it is clear that this was an illusion. As the Commission noted, "...by trying to solve all ICBM tasks with a single weapon and a single basing mode in the face of the trends in technology, we have made the problem of modernizing the ICBM force so complex as to be virtually insoluble." Or, in the words of Voltaire, sometimes, "...the best is the enemy of the good."

With the Peacekeeper missile deployed in Minuteman silos, we will restore our retaliatory capability. However, for the near term, we must rely on the interaction of the TRIAD legs to provide some degree of ICBM survivability. The point here, to quote the Commission report once again, is that "whereas it is highly desirable that each component of the strategic forces be survivable when it is viewed separately, it makes a major contribution to deterrence even if this survivability depends in a substantial measure on the existence of one of the other components of the force." With respect to the longer-term, the President's ICBM modernization plan will achieve survivability through an extended, two-step process: development of a new small missile, and research and development on mobility, silo hardening, ballistic missile defense, and deep underground basing.

Just as there are significant advantages to diversity among the TRIAD forces, there might also be significant advantages to diversity within the ICBM force. By deploying different types of ICBMs -- each with different capabilities -- and basing them in dissimilar configurations, the independent survivability

of the ICBM force as a whole might be dramatically improved, while its flexibility is increased.

Specifically, by deploying the Peacekeeper we will quickly provide the ICBM force with the retaliatory hard target capability necessary to maintain deterrence. The Peacekeeper's throw-weight also gives us sufficient payload flexibility to maintain retaliatory effectiveness even if the Soviets were to harden their strategic assets even further, or violate the ABM Treaty by rapidly and massively increasing their ballistic missile defense deployments. By deploying a new small missile we would add to the flexibility and overall capability of the ICBM force while providing basing options, such as mobility, that are not feasible with larger missiles. And by deploying the ICBM force in a range of dissimilar basing modes, we improve the survivability of our entire ICBM force by driving the Soviet offensive force structure in opposite and counterproductive directions. That is, a force structure designed to effectively attack one type of basing mode may be ill suited to attack a different basing mode.

As mentioned earlier, the President's plan includes vigorous research on new techniques for hardening silos and shelters, on different types of land-based vehicles and launchers, including hardened vehicles, on ballistic missile defense and deep underground basing, and on the phenomenon of fratricide, that is, destruction of an attacking warhead by the explosive effects of another. By supporting such diversity, the President's plan retains -- and even enhances -- our options for a changing strategic environment.

But the impact of the President's ICBM modernization plan extends beyond the world of nuclear deterrence. It also will have a significant impact on our ability to meet our commitments

to our friends and allies. One important effect could be on the essential NATO INF modernization program. Scheduled to begin late this year, this program is necessary to counter the growing European strategic imbalance resulting from the persistent Soviet build up of its SS-20 intermediate range missile force. Many of our NATO allies are watching the decision on the deployment of the Peacekeeper very closely. Deployment of a modern land-based missile system in this country is necessary to maintain the effectiveness of the U.S. strategic deterrent, just as ending the present imbalance in Europe -- either through arms reduction or deployment of modern intermediate range nuclear forces in Europe -- is essential to keeping our allies securely linked to the U.S. strategic umbrella. Failure to deploy Peacekeeper could not only undercut the ability of key allied governments to muster and hold the political support necessary to back Pershing II and ground-launched cruise missile deployments in their countries but also be seen as undercutting America's nuclear umbrella for NATO.

But the President's plan also has a wider, more long-term impact. The peacetime, day-to-day, decisions that collectively make up the behavior of the United States, the Soviet Union and all other nations are influenced by perceptions of the U.S.-Soviet strategic balance. The greater the imbalance, the more conscious we become of the limits to our options in international affairs and the greater the chance that we might be forced to compromise our interests to avoid crises that might overburden our capacity to deter conflict. In the same vein, the greater the imbalance, the greater the tendency of the Soviet Union to embrace ever more ambitious definitions of what constitute legitimate Soviet interests; the greater their tendency to view the risks of crises as an acceptable price to pay for the satisfaction of their political aims. The behavior of other nations is affected by perceptions of the strategic balance too. The greater the imbalance, the greater the tendency to view

Soviet aims as interests to be accommodated; the greater, also, their tendency to view U.S. aims as interests to be ignored or challenged.

Today, we are confronted with just such a strategic imbalance; an imbalance that, in the face of the continued enhancement of Soviet power, will only worsen if we do nothing to counter it. There are many things we can do to reestablish a strategic balance, some of which, as I mentioned earlier, we are doing already. However, if we do not modernize the ICBM leg of the TRIAD, and maintain those important capabilities unique to the ICBM, restoration of a strategic balance will not be possible. As my predecessor, Harold Brown, wrote recently: "....we said in the early 1970s that we would modernize with a new missile in the late 1970s. In the mid-1970s we said that we would do so in the early 1980s, and in the late 1970s that we would in the mid-1980s. We have failed so far to do any of those things, even while the Soviets were deploying over 600 new ICBMs, each with a payload equal to or greater than that of MX, and with accuracies now matching those of the most accurate U.S. ICBMs.

To say that the United States will modernize in the early 1990s with a small single-warhead missile will just not be believable. The Soviets would be justified in calculating that any new U.S. ICBM system will be aborted by some combination of environmental, doctrinal, fiscal, and political problems."

Finally, there is the important consideration of arms control. While a strong and viable deterrent is essential to the maintenance of peace, our search for a durable foundation that can support a lasting peace must also incorporate significant and verifiable reductions in the size and destructive potential of existing nuclear arsenals. The President's ICBM modernization

plan is fully consistent with, in fact, necessary to, such arms reductions. As you are all aware, the President has proposed a strategic arms reduction proposal, START, which would reduce by one third the overall size of both sides' deployed ballistic missile warheads, with even greater reductions in those weapons systems that are potentially the most destabilizing -- land-based ballistic missiles. Whether the President's START proposal is successful will, in large measure, depend on Soviet perceptions of this nation's determination to maintain its deterrent capability in the face of the persistent growth of Soviet military power. Because the ICBM modernization plan is essential to our deterrence capability, the Soviets will undoubtedly perceive this nation's decision on whether to support it a litmus test of the extent of that determination. If the American people and its Congress give their support, the Soviet Union will come to the realization that the United States understands the current strategic realities and fully intends to meet the national security obligations these realities impose. By reinforcing this perception of American determination, vigorous ICBM modernization will discourage the notion that a continuation of the Soviet arms build up will afford the Soviet Union any strategic advantage and encourage Soviet cooperation in bringing strategic arms under control. Conversely, failure to modernize will serve only to foster a Soviet belief in the soundness of their policy of seeking unilateral strategic advantage through the continued deployment of ever more powerful weapons in ever greater numbers.

Until this issue is clearly resolved in favor of a modernized ICBM force, we can expect little cooperation from the Soviet Union in Geneva. We have learned the hard way that the Soviet Union is impressed not by self-restraint, but by determination. For the first time they have proved willing to sit down at the negotiating table to discuss arms reduction;

let us give them the incentive to stay there and reach fair, equitable, and verifiable agreements.

Let me make one final point about the centrality of our ICBM modernization plan to arms control. This Administration has sought to move away from arms control agreements that confine their restrictions to such limited measures of strategic capability as launchers and missiles, and emphasized instead those elements of strategic capability that threaten to upset stability. In this connection, I was pleased to note that the Commission report echoed this Administration's focus on warhead and throw-weight reductions in the START negotiations.

The President's modernization plan supports this concern with stability by holding out the promise, over the long-term, of channeling ICBM forces into more stable directions. Such stability can be enhanced by deployments that distribute the total number of warheads contained in the ICBM forces over a larger number of smaller missiles, thereby reducing the target value of individual ICBMs. In reducing the value of individual strategic assets, we reduce the attack incentive of a potential aggressor. If this promise is to be realized, we must pursue the two-step process provided by the President's plan.

First, we must deploy the Peacekeeper missile to end the current, destabilizing advantage the Soviet Union enjoys in critical prompt hard target capability. The Soviets will not voluntarily give up their current strategic advantage. If we do not take this first step, they will have no incentive to move toward ICBM deployments that are more stabilizing. Deployment of the Peacekeeper will act as a necessary foundation and catalyst for a restructuring of U.S. and Soviet ICBM forces.

Second, we must vigorously pursue small, single warhead missile technology and operational concepts to determine the technical, operational and fiscal feasibility of moving to an ICBM structure that increases the emph is on the deployment of ICBMs that individually are of less value as targets.

The report issued by the President's Commission reflects the dedication and patriotism with which this bipartisan group of distinguished Americans responded to the task given them. Let me end, then, by quoting from the end of their report:

> "If we can begin to see ourselves, in dealing with these issues, not as political partisans or as crusaders for one specific solution to a part of this complex set of problems, but rather as citizens of a great nation with the humbling obligation to persevere in the long-run task of preserving both peace and liberty for the world, a common perspective may finally be found."

Prepared Statement of Gen. John W. Vessey, Jr, USA

Chairman, Joint Chiefs of Staff

Mr. Chairman, members of the Committee, thank you for inviting me to testify on the important subject of strategic force modernization and the JCS views on the report of the President's Commission on Strategic Forces.

In December of last year, the President asked the Joint Chiefs of Staff to review our strategic forces modernization program, and to report back to him in February with the results of the review. We did so. We also reviewed the report of the President's Commission and provided our recommendation to the President on that report on the 4th of April. Today, Mr. Chairman, I report to you that the Joint Chiefs of Staff, working independently of the Commission, arrived at land-based ICBM force conclusions which are fundamentally the same as those of the President's Commission. I can report to you, as the JCS did to the President, that the JCS are unanimous in their support for the report of the Commission.

Through the years, the Joint Chiefs of Staff have examined strategic nuclear force issues in great detail. This particular group of Chiefs has continued the examination. Since last fall, we have met 48 times to examine strategic nuclear force issues. We have looked at our entire strategic nuclear force, examined its effectiveness, survivability, the need for modernization, and the arms control impacts of our programs. We have looked at the intercontinental ballistic missile force, with particular emphasis on MX, its contribution to our total force, and the alternate basing modes for the MX. We have heard reports from recognized authorities from both inside and outside the Government; we met often with the Secretary of Defense on these issues; we met twice with the President's Commission; and since the first of the year we have met twice with the President on strategic forces issues. We have spent a great deal of time and effort studying the problems.

The need for our defense forces stems from the threats this country may face. The Soviets have made massive strategic deployments in the past decade. In the past six years, they have deployed among the most accurate operational missiles in the world, and those missiles are based in the world's hardest missile silos. In the last year, as part of the further modernization of their missiles, they deployed over 1,200 modern, hard-target attack warheads--more than we intend to deploy in our entire ICBM modernization program.

In considering the modernization of our strategic forces, we must recognize that accelerating Soviet modernization and our own lack of modernization in the past two decades has left us well behind the Soviet Union in several important measures of military capability. We have not deployed a new ICBM since the early 1970s. We have deployed only one new ballistic missile submarine since 1967; in fact, under the provisions of SALT I, the Soviets are dismantling ballistic missile submarines that are newer than our newest POSEIDON boats. We began to deploy cruise missiles only in December of last year. On the other hand, during this same period the Soviet Union tested and deployed several new types of ICBMs and new and improved submarine-launched ballistic missiles. The Soviets have had cruise missiles deployed on submarines since the early 60s.

For the past several decades, the United States has relied on deterrence through strength to counter the growing Soviet threat. We have tried to make it clear to the Soviets that they would not be able to achieve their aims through war. Our strategy is to deter war. The Joint Chiefs of Staff believe that deterrence and stability come from establishing significant doubt in the minds of the Soviets that their war aims can be achieved. We also believe that from the military point of view the entire range of US and Allied forces --strategic nuclear forces, theater nuclear forces, and general purpose forces--all contribute to deterrence. The present body of the Joint Chiefs of Staff has consistently recommended the modernization of the entire strategic nuclear TRIAD

to restore an adequate margin of safety in the immediate future. The President's Commission has made the same recommendation.

On the 11th of February, the Joint Chiefs of Staff briefed the President on the results of their review of strategic forces and recommended:

--Continued strong support for the TRIAD, and continued support to modernize the TRIAD. We believe that the combination of land-based ICBMs, sea-based ballistic missiles, and bombers with air-launched cruise missiles provide a broad range of capabilities whose synergism complicates the Soviet planning, provides us flexibility and provides an important hedge against technological surprise by the Soviets in neutralizing any particular leg of the TRIAD.

--Continued highest priority support for improvements in command, control, communications and warning. Because our strategy is one that does not include a first-strike, the ability of the command and control and intelligence system to survive an attack and provide the wherewithal to retaliate is key to deterrence.

-- Field MX in MINUTEMAN silos. The accurate, prompt, hard-target attack capability of the MX is needed now and will add greatly to our deterrent strength.

--Continued research and development for survivable land-based ICBM systems, to include research on small mobile ICBMs.

--Continued research to resolve the uncertainties about hardness of fixed bases for ICBMs.

--We also recommended that the President set a new direction for the future and announce increased research for active defense against ballistic missiles. We pointed out our recognition that there was no near-term solution for defense against ballistic missiles, but that technological developments on the horizon could give hope to our own people and to our allies that we could use our technology to provide defenses which, when supplemented with arms control agreements, could move us away from sole dependence on the threat of retaliation.

The Commission pointed out that it is the survivability and effectiveness of the entire TRIAD, and not of any single leg, on which deterrence must rest. Strategic modernization must deal with the combination of land-based ICBMs, sea-based ballistic missiles, and bombers with air-launched cruise missiles, all providing a broad range of necessary, complementary and mutually supporting capabilities. The synergism of these capabilities complicates Soviet planning and provides us flexibility to threaten various forms and levels of retaliation against the Soviet Union. It also provides an important hedge against technological surprise which might lead to neutralization of any leg of the TRIAD. We agree with the Commission that deployment of MX as soon as possible is necessary to counter the increasing Soviet military advantage. The accurate MX warheads will let the Soviets know that their missile silos, their leadership, bunkers, and associated command and control are placed at risk, and that their ability to achieve their war aims is seriously in doubt. It also provides leverage in arms control negotiations, and thus improves our deterrent posture.

I told the Senate Armed Services Committee on 8 December that the Joint Chiefs of Staff fully supported the deployment of MX but that there were differing views on the basing mode. On 21 April 1983 we reported to the Senate Armed Services Committee and the House Armed Services Committee that we all support basing MX in MINUTEMAN silos. Now, some will ask what has changed our views since the President's 22 November 1982 recommendations on deployment. To set this issue to rest, let me provide you some of the details of our November recommendations to the President. On 8 November we told the President that we believed he was being forced into a final basing decision prematurely and that his first decision to field MX in MINUTEMAN silos while searching for a better mode was a good decision. Three of the Chiefs dis-agreed with deploying in closely spaced basing. The principal concerns of two of those three were technological and cost uncertainties of closely spaced basing. General Gabriel and I, considering the early congressional rejection of MX in MINUTEMAN silos, recommended going ahead with deployment in the closely spaced basing mode and recommended a vigorous research and development program to resolve the uncertainties in closely spaced basing. We believed that most of the uncertainties could be resolved and that uncertainty itself has deterrent value.

Central to all viewpoints was unanimous agreement on the importance of deploying on schedule. After considering the intervening political development and in reconsidering the arguments on technological uncertainty, the Joint Chiefs of Staff have unanimously concluded that the crucial need for an advanced highly capable ICBM can best be met by the deployment of MX in MINUTEMAN silos.

The Commission correctly looked beyond the specifics of an MX basing mode, and more importantly did not consider the ICBM force in isolation. They recognized that our goal should be to increase stability. We endorse their recommendation that research on a small, single warhead ICBM begin at once. Development of such a weapon may offer the prospect of continued deterrence with even greater stability in the future. We also strongly support the recommendation for continued research to resolve uncertainties about silo or shelter hardness. The Commission's report gives us a formula that makes sense both militarily and fiscally.

Following the Commission's recommendations will provide effective deterrence. The deployment of MX will help redress the imbalances that have developed over the past decade. In the future, adding the small single warhead ICBM coupled with an aggressive arms control effort offers the prospect of increased stability. We believe that these steps coupled with the President's long-term goal of effective defense against ballistic missiles provide a blueprint for deterrence well into the next century.

In our review of strategic systems and our overall strategic posture we have also looked at costs. We believe that the President's budget represents a balance among our strategic nuclear, our theater nuclear forces and our general purpose forces. The President's program for strategic forces represents less than 15 percent of the DoD budget for each year of the five year period. This equates to about one percent of the GNP. The estimated cost of the President's program based on the recommendations of the Commission would be $5.3 billion in FY 1984. This is $4.7 billion for deployment of MX in MINUTEMAN silos and $.6 billion to begin follow-on technology. The total cost of deploying MX in MINUTEMAN silos is estimated to be $16.6 billion (constant 82 dollars). This is $9.8 billion less than the $26.4 billion estimated for CSB deployment for MX. The Commission recommended an additional $1.5 billion for research on hardening techniques and for engineering design for a small missile. Results of this concept development effort will determine additional funding requirements for FY 1987 and beyond. In terms of cost and military capability the President's proposal represents a balanced approach to the modernization of our strategic nuclear deterrent.

Before concluding, I should discuss arms control. As the Secretary of Defense noted in his FY 1984 Annual Report, it is the policy of the United States to maintain the lowest level of armament compatible with the preservation of our security and that of our allies. The Joint Chiefs of Staff have concluded that the preservation of that security urgently requires deployment of MX and continuation of the strategic modernization program. But we are united in strong support for meaningful, effective, and verifiable arms reduction. Such reductions will occur only if we make it clear to the Soviets that we have the resolve to maintain an adequate strategic deterrent force. Approval of the President's recommendations is an essential first step toward greater stability and genuine arms reductions.

All of us share a common desire to provide for our national security in the most effective and most economical way. Soviet goals and objectives are not a reflection of our own, and the capability that might deter the United States does not necessarily deter the Soviet Union. The Joint Chiefs of Staff are firmly convinced that the program outlined by the President is needed to deter aggression and represents a balanced approach to providing the forces necessary to provide for the common defense. A strong modern deterrent, coupled with aggressive arms control policies, will provide for stability and ensure national security. The President's decision has the unqualified support of the Joint Chiefs of Staff and deserves the full support of the Congress. I urge this Committee to lead the Congress to appropriate the funds for this most important undertaking in providing security for the American people and the Free World.

Mr. Chairman, I am ready for your questions.

REVITALIZING LAND LEG OF STRATEGIC TRIAD

Chairman HATFIELD. Mr. Secretary, you may proceed.

Secretary WEINBERGER. Thank you, Mr. Chairman and members. I appreciate having the full statement printed in the record. I will summarize, and then if General Vessey has a statement, then we will be glad to try to take your questions.

We appreciate very much the opportunity to discuss the President's plan for revitalizing the land-based leg of the strategic triad. This is not my first visit to this distinguished committee to talk about the need to modernize our ICBM forces. Nor am I the first Secretary of Defense that has wrestled with this. I can think of few national security issues that have been so addressed. Four Presidents, six Secretaries of Defense, and a majority of the Members in several sessions of Congress all have concluded that we must modernize our ICBM forces. We have been at the drawing board and have kept going back to it, so to speak, now for about 12 years.

The members of the President's Commission on Strategic Forces have done us all a very great service, not just because they have presented an eminently reasonable, and achievable, proposal for modernizing the ICMB's. They also reminded us that there is a long-standing, bipartisan consensus about at least three facts. First, that the United States pursues peace and protects its freedom and the freedom of its allies through a joint strategy of deterrence and arms control. Second, that deterrence depends on retaining a multiplicity, and more specifically a triad, of strategic forces, including intercontinental ballistic missiles. And third, that in view of actions taken by the Soviet Union over the last decade and a half, we must take steps now to ensure the effectiveness of that triad and in so doing not only maintain deterrence but also improve the prospects for genuine, mutual, and significant reductions in nuclear weapons.

THREE POINTS SUPPORTING MODERNIZATION OF ICBM

The three points we have found generally are important to understand because they lie at the heart of why we must modernize our ICBM forces.

Since the dawn of the age of strategic weapons, we have maintained peace and preserved our freedom, and that of our allies, through the policy of deterrence and the strategic capability which backs it up. It serves as a clear indication that the United States has the will and means necessary to resist aggression. By maintaining the ability to retaliate against a potential aggressor in such a manner that the costs we will exact will exceed substantially any gains he might hope to achieve through aggression, we can prevent any aggressor from coming to believe that he could profit from or win a nuclear war.

We for our part, are under no illusions about the consequences of nuclear war. We know there would be no winners in a nuclear exchange. But this recognition on our part is not enough to maintain deterrence. The Soviet leadership must understand this as well. As the Commission's Report so ably puts it, "Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to

determine, as best we can, what would deter them from considering aggression, even in a crisis—not to determine what would deter us."

TRIAD

To deter the Soviet Union over the last two decades, we have maintained a strong and independent combination of strategic forces, known as the triad, which consists of land-based intercontinental ballistic missiles, sea-based ballistic missiles, and manned strategic bombers. This multiplicity of forces provides three significant benefits.

First, each of the strategic components of the triad acts in concert with the others to complicate Soviet planning, making it more difficult for the Soviet Union not only to plan and execute a successful attack but also to defend against retaliation.

Second, each of the legs of the triad acts as a hedge against a possible technological breakthrough that could threaten the viability of any strategic system. By maintaining a triad we force the Soviet Union to disperse their resources among three components, preventing them from concentrating their considerable resources on defeating two or perhaps only one U.S. strategic system.

Finally, only a triad of three unique systems can provide us with all the elements necessary to provide a strong, and secure deterrent. The strengths of each system not only complement the strengths of the other two but also compensate for their weakness. To deter successfully all types of nuclear attack, our forces as a whole must possess a number of characteristics and capabilities—including survivability, prompt response, mission flexibility, sufficient accuracy and warhead yield to retaliate against hardened Soviet military targets. No single weapons system can incorporate all of these capabilities. Submarines are less vulnerable, but they are less accurate, and they are at all times difficult to communicate with. Bombers are accurate, and retrievable, but they are much slower. ICBM's are easier to command and control, faster, and more accurate, but today they are more vulnerable than submarines and, once launched, irretrievable. But all three systems together incorporate all those elements necessary to deter against all types of attack.

SOVIET MISSILE GAINS SINCE 1960'S

For years it was our good fortune to possess a triad whose effectiveness could be assured well into the future. Unhappily, due to massive, and largely unmatched, strategic buildup the Soviets have sustained since the 1960's, those days are gone. That buildup has created substantial vulnerabilities in our strategic triad, which has altered the strategic balance and effectiveness of our forces and weakened our ability to deter war.

In recognition of this, the President has initiated, and the Congress has supported, over the last 2 years a number of initiatives to restore the strategic balance. He has also done this to restore the effectiveness of all of our forces. We have begun, and we are continuing, to modernize and improve the sea-based and air-based leg

of the triad. But one very serious weakness in our triad has yet to be resolved, and that is the modernization of the land-based leg.

MODERNIZATION OF LAND-BASED LEG OF TRIAD

The ICBM's role, which is required to maintain an effective land-based leg of the triad, is important for two reasons. First, because the ICBM's possess a unique characteristic not found in the other two legs. It has the highest peacetime readiness capability that discourages surprise attack. With the defense strategy that we have, we must always guard against surprise attack. It also has a command, control, and communication link. It has prompt countermilitary capability. But it has the lowest operation and support costs of our strategic forces, which allows for greater resource efficiency. In addition, it provides a third type of weapons system which in combination with the other two legs complicates Soviet plans and prevents Soviet concentration in resources.

So if we don't modernize the land-based leg of our triad now, we will not only forego those capabilities unique to ICBM, but we will also undercut the capability of the triad as a whole. Furthermore, we will have failed to compensate for the Soviet monopoly of prompt, hard, target-kill capability that lies at the heart of our imbalance. A lot of that capability, Mr. Chairman, as you know, is based upon the accuracy of the Soviet system, of which a great part came from our technology which they either took through trade or stole from us. That is one of the problems that we must deal with today, to regain a balance that we did have which has been upset by Soviet modernization and our failure to do so.

ADMINISTRATION PROPOSAL FOR MISSILE MODERNIZATION

The President's proposal is in line with those that several administrations have made in the past. They have recognized the requirement to modernize the land-based force. We frequently have embraced different solutions to this problem. All of us I think have shared the belief that if we look long and hard enough a single, perfect solution would be revealed. By now it seems clear that this is an illusion. No one, single, perfect solution is possible. And, again, this is largely due to the improvements in Soviet accuracy.

The President's Commission has done a second great service. They have recognized no one weapon system will be able to solve all of our problems. So they have said that we should continue with the modernization without changing the other two legs. The President's proposal for modernizing the land-based leg of the triad, which the Commission has recommended and which the Joint Chiefs and I fully endorse, consists of a two-phase solution which will not only restore the overall strategic balance but will solve the problems of retaliatory effectiveness and survivability.

PEACEKEEPER MISSILES

It calls for a limited deployment of 100 Peacekeeper missiles in Minuteman silos which will reestablish our capability to place Soviet hard targets at risk which is necessary to maintain deterrence; however, it will not provide the degree of ICBM survivability

that we would ultimately require of it, although it would do that in the near term. However, for the near term, we must rely upon the interaction of the triad legs to provide some degree of ICBM survivability. We also may find as we study, under the Commission's direction, that the hardening which we recommend be pursued may very well add to the survivability of the ICMB's, and the MX Peacekeeper missile in the near term in these existing silos. To quote the Commission report once again is:

> Whereas it is highly desirable that each component of the strategic forces be survivable when it is viewed separately, it makes a major contribution to deterrence even if this survivability depends in a substantial measure on the existence of one of the other components of the force.

With respect to the longer term, the President's ICBM modernization plan will achieve survivability through an extended, two-step process: development of a new small missile, and continued research and development on mobility, and silo hardening that I mentioned, in addition to ballistic missile defense, and deep underground basing.

The Department of Defense has already done a great deal of work on the Peacekeeper missile. We are ready to begin flight testing in the near future. We have also begun to preliminarily test the missile, to begin the engineering design of that small, single-warhead ICBM, and we are prepared to move ahead very quickly on both the MX Peacekeeper deployment and development of a small missile if Congress approves the President's proposal.

In seeking the two-phase approach of Peacekeeper deployment in Minuteman silos and development of a small missile, we will strengthen the triad both in the near and longer term. In so doing we will restore strategic balance and increase our ability to deter nuclear war.

ARMS CONTROL AND ARMS REDUCTION

With respect to arms control and arms reduction, as the President prefers to refer to it, the President's ICBM proposal has another, and equally important, effect. It will provide the Soviets with the incentives they need to agree to keep balance and mutually verifiable arms reduction. I think we are all aware the President has proposed to the Soviet Union that we reduce dramatically the overall number of deployed ballistic missiles on both sides. Whether the President's START proposal is successfull will, in large measure, depend on whether the Soviet leaders believe we are determined to maintain an effective deterrent capability in the face of their massive strategic buildup. If they believe that our current round of debates will not produce ICBM deployment, but only future debates, then they will have no incentive to negotiate reductions and will continue to seek unilateral strategic advantage, or indeed monopoly, as they have had in the intermediate-range missile, and deployment of more powerful weapons in much greater numbers.

We have learned the hard way that the Soviet Union is impressed not by self-restraint, but by determination. For the first time they have proved willing to sit down at the negotiating table to discuss general arms reduction. Now we must give them the in-

centive to stay there so we may reach fair, equitable, and verifiable agreements.

CENTRALITY OF ICBM MODERNIZATION TO ARMS CONTROL

I would like to make one final point about the centrality of our ICBM modernization plan to arms control. This administration has sought to move away from arms-control agreements, such as SALT, that confine their restriction to such limited measures of strategic capability as launches and missiles, and emphasized instead those elements of strategic capability that threaten to upset stability. In this connection, I was pleased to note that the Commission report echoed this administration's focus on warhead numbers and throw weight as the most effective ways to measure destructive power.

The President's modernization plan supports this concern with stability by holding out the promise, over the long term, of channeling ICBM forces into more stable directions. Such stability can be enhanced by deployments that distribute the total number of warheads contained in the ICBM forces over a larger number of smaller missiles, thereby reducing the target value of individual ICBM's. In reducing the value of individual strategic assets, we reduce the attack incentive of a potential aggressor.

In addition to enhancing stability, the modernization plan holds out a promise for arms reduction. In the past, our arms-control positions have always lagged behind our weapons development program. Once we and the Soviets fractionate our missiles, or MIRV them, we then set out to place limits on them. We realized after the fact that this was difficult because of verification questions and because previous arms-control proposals have focused on the numbers of launchers, not warheads. This administration has sought to address the most stabilizing or least threatening buildup by focusing on the number of basic warheads. By developing a small, single-warhead missile, especially if the Soviets follow suit, we will vastly simplify the problems that are associated with reaching arms-reduction agreements. But if these proposals are to be realized, we must pursue this two-step process provided by the President's plan.

In conclusion, let me say that the report issued by the President's Commission reflects the dedication and patriotism with which this bipartisan group of distinguished Americans responded to the task given them. They said in their concluding remarks:

> If we can begin to see ourselves, in dealing with these issues, not as political partisans or as crusaders for one specific solution to a part of this complex set of problems, but rather as citizens of a great nation with the humbling obligation to persevere in the long run task of preserving both peace and liberty for the world, a common perspective may finally be found.

Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Mr. Secretary.

STATEMENT OF GENERAL VESSEY

JCS REVIEW OF STRATEGIC FORCES

General VESSEY. Mr. Chairman, members of the committee, thank you for inviting me to bring you the views of the Joint

Chiefs of Staff on the strategic force modernization and the report of the President's Commission on Strategic Forces.

In December of last year, the President asked the Joint Chiefs of Staff to review again our strategic forces modernization program, and to report back to him in February with the results of the review. We did so. We also reviewed the report of the President's Commission and we provided our views to the President on that report on April 4. Today, I want to report to you that the Joint Chiefs of Staff, working independently of the Commission, arrived at land-based ICBM force conclusions and recommendations which are fundamentally the same as those of the President's Commission. And I can report to you, as the JCS did to the President, that the JCS are unanimous in their support for the report of the President's Commission.

STRATEGIC FORCE EXAMINATION BY JCS

Through the years, the Joint Chiefs of Staff have been in the business of examining strategic force issues in great detail. This particular group of Chiefs is no different. Since last fall, we have met 48 times to examine strategic nuclear-force issues. We have looked at our entire strategic nuclear force, examined its effectiveness, its survivability, the need for modernization, and the arms-control impacts of our program. We have looked at the intercontinental ballistic missile force, with particular emphasis on the MX, its contribution to the total force, and the alternative basing modes that might be used. We have listened to reports from recognized authorities from both inside and outside the Government. We met often with the Secretary of Defense on these issues. We met twice with the President's Commission, and since the first of the year we have met twice with the President on strategic forces issues. We have spent a great deal of time studying the issues.

The need for our defense forces stems from the threats this country may face. The Soviets have made massive strategic deployments in the past decade. In the past 6 years, they have deployed among the most accurate operational missiles in the world, and those missiles are based in the world's hardest missile silos. In the last year, as a part of the further modernization of their missiles, they deployed over 1,200 modern, hard-target attack warheads—more than we intend to deploy in our entire ICBM modernization program.

In considering the modernization of our strategic forces, we must recognize that accelerating Soviet modernization and our own reluctance to modernize in the past two decades have left us well behind the Soviets in several important measures of military capability. We have not deployed a new ICBM since the early 1970's. We have deployed only one new ballistic missile submarine since 1967. In fact, under the provisions of SALT I, the Soviets are dismantling ballistic missile submarines that are newer than our newest Poseidon boats. We began to deploy cruise missiles only in December of last year. On the other hand, during the same period the Soviets tested and deployed several new types of ICBM's and new and improved submarine-launched ballistic missiles. The Sovi-

ets have had cruise missiles deployed on their submarines since the early 1960's.

U.S. STRATEGY OF DETERRENCE

For the past several decades, the United States has relied on deterrence through strength to counter the growing Soviet threat. We have tried to make it clear to the Soviets that they would not be able to achieve their aims through war. Our strategy is deterrence. The Joint Chiefs of Staff believe that deterrence and stability come from establishing significant doubt in the minds of the Soviets that their war aims can be achieved. We also believe from a military point of view the entire range of U.S. forces and our allied forces contribute to deterrence. That is strategic nuclear forces, theater nuclear forces, and all our general purposes forces. The present body of the Joint Chiefs of Staff has consistently recommended the modernization of the entire strategic nuclear triad to restore an adequate margin of safety in the immediate future. The President's Commission has made the same recommendation, as the Secretary pointed out.

JCS RECOMMENDATIONS ON STRATEGIC FORCES REVIEW

On February 11, the Joint Chiefs of Staff briefed the President on the results of their review of strategic forces and made the following recommendations:

We recommended continued strong support for the triad and continued support to modernize the triad. We believe that the combination of land-based ICBM's, sea-based ballistic missiles, and bombers with air-launched cruise missiles will provide a broad range of capabilities whose synergism complicates the Soviet planning, provides us flexibility, and provides an important hedge against technological surprise by the Soviets in their attempts to neutralize any particular leg of the triad.

We recommended continued highest priority support for improvements in command, control, communications, and warning. Our strategy does not include first strike, so the ability of our command, control, and intelligence systems to survive an attack and provide the wherewithal to retaliate is key to our deterrence strategy.

We recommended fielding the MX in Minuteman silos. The accurate, prompt, hard-target attack capability of the MX is needed now and will add greatly to our deterrent strength.

We recommended continued research and development for survivable land-based ICBM systems, to include research on small, mobile ICBM's.

We recommended continued research to resolve the uncertainty about hardness of fixed basing for ICBM's.

We also recommended that the President set a new direction for the future and announce increased research for active defense against ballistic missiles.

SURVIVABILITY OF TRIAD

The Commission pointed out quite directly that it is the survivability and effectiveness of the entire triad, and not any single leg, on which deterrence must rest. Strategic modernization must deal with the combination of land-based ICBM's, sea-based ballistic missiles, and bombers with air-launched cruise missiles, all these together providing a broad range of necessary, complementary, and mutually supporting capabilities. The synergism of tnese capabilities complicates Soviet planning and provides us flexibility to threaten various forms and levels of retaliation against the Soviet Union. It also provides us that important hedge against technological surprise which might neutralize one or more legs of the triad. We agree wholeheartedly with the Commission that deployment of MX as soon as possible is necessary to counter the increasing Soviet military advantage. The accurate MX warheads will let the Soviets know that their missile silos, their leadership, bunkers, and associated command and control are placed at risk, and their ability to achieve their war aims is seriously in doubt. Certainly, as the Secretary pointed out, it will provide us leverage in arms control negotiations, and thus improve our overall deterrent posture.

VARIATIONS IN BASING MODE OF MX

On December 8, I told the Senate Armed Services Committee the Joint Chiefs fully supported the deployment of MX but there were differing views on the basing mode. On April 21, we reported to the Senate Armed Services Committee and the House Armed Services Committee that we all support basing MX in the Minuteman silos. Some of you might well ask what changed our views since the President's November 22, 1982, recommendation on deployment. To set that issue at rest, let me provide some details of our November recommendations to the President.

On November 8, we told the President that we believed he was being forced into a final basing decision prematurely and that his first decision to field MX in the Minuteman silos while searching for a better mode was a good decision. Three of the Chiefs disagreed with deploying in closely spaced basing. The principal concerns of two of those three were technological and cost uncertainties of closely spaced basing. General Gabriel and I, considering the early congressional rejection of MX in Minuteman silos, recommended going ahead with the deployment in the closely spaced basing mode and recommended a vigorous research and development program to resolve the uncertainties in closely spaced basing. We believe that most of those uncertainties could be resolved and that uncertainty itself has a deterrent value. I want to emphasize central to all the viewpoints of the Chiefs at that particular time was unanimous agreement on the importance of deploying the MX on schedule. After considering the intervening political development and reconsidering the arguments on technological uncertainty, the Joint Chiefs of Staff unanimously concluded that the crucial need for an advanced highly capable ICBM can best be met by the deployment of MX in the Minuteman silos.

The Commission correctly looked beyond the specifics of any particular MX basing mode, and more importantly did not consider

the ICBM force in isolation. They recognized that our goal should be to increase stability. We endorse their recommendation that research on a small, single-warhead ICBM begin at once. Development of such a weapon may offer the prospect of continued deterrence with even greater stability in the future. We also strongly support the recommendation for continued research to resolve uncertainties about silo or shelter hardness. The Commission's report gives us a good formula that makes sense both militarily and fiscally.

Following the Commission's recommendations will provide effective deterrence. The deployment of the MX will help redress the imbalances that have developed over the past decade. In the future, adding the small, single-warhead ICBM coupled with an aggressive arms control effort offers the prospect of increased stability. We believe that these steps coupled with the President's long-term goal of effective defense against ballistic missiles provide a blueprint for deterrence well into the next century.

STRATEGIC SYSTEMS REVIEW

In our review of strategic systems and overall strategic posture we have also looked at costs. We believe that the President's budget represents a balance among our strategic nuclear, our theater nuclear forces and our general purposes forces. The President's program for strategic forces represents less than 15 percent of the DOD budget for each year of the 5-year period. That equates to about 1 percent of GNP. The estimated cost of the President's program based on the recommendations of the Commission would be $5.3 billion in fiscal year 1984. This is approximately $4.7 billion for deployment of MX in Minuteman silos and $0.6 billion to begin the follow-on technology in the areas that I outlined. The total cost of deploying MX in Minuteman silos is estimated to be $16.6 billion in constant 1982 dollars. That is $9.8 billion less than the $26.4 billion that was estimated for the closely spaced basing. The Commission recommended an additional $1.5 billion for research on hardening techniques and for engineering design for a small missile. Results of this concept development effort will determine additional funding requirements for 1987 and beyond. In terms of cost and military capability, the President's proposal represents a balanced approach to the modernization of our strategic nuclear deterrent.

ARMS CONTROL

Before concluding, I would like to add a few words on arms control. As the Secretary of Defense pointed out in his annual report this year, it is the policy of the United States to maintain the lowest level of armament compatible with the preservation of our security and that of our allies. The Joint Chiefs of Staff have concluded that the preservation of that security urgently requires deployment of MX and continuation of our strategic modernization program. But we are also united in strong support for meaningful, effective, and verifiable arms reduction. Such reductions will occur only if we make it clear to the Soviets that we have the resolve to maintain an adequate strategic deterrent force. Approval of the

President's recommendations is an essential first step toward greater stability and genuine arms reductions.

All of us share a common desire to provide for our national security in the most effective and most economical way. Soviet goals and objectives are not a reflection of our own, and the capability that might deter the United States does not necessarily deter the Soviet Union. The Joint Chiefs of Staff are firmly convinced that the program outlined by the President is needed to deter aggression and represents a balanced approach to providing the forces necessary to provide for the common defense. A strong modern deterrent, coupled with aggressive arms control policies, will provide for stability and insure national security. The President's decision has the unqualified support of the Joint Chiefs of Staff and deserves the full support of the Congress. I urge this committee to lead the Congress to appropriate the funds for this most important undertaking in providing security for the American people and the free world.

Thank you.

Chairman HATFIELD. Thank you.

SURVIVABILITY OF SILO-BASED MISSILES

Mr. Secretary, for years the Congress has been informed that there is a serious need to redress the imbalance between the Soviet and the U.S. ICBM forces and close the so-called window of vulnerability. It was this Soviet threat that in effect gave rise to not only our efforts to modernize the triad but to support the MX missile warhead itself. And that leads us to this particular debate here today before this committee. Now the President's Commission, the Scowcroft Commission, has just concluded its report and it states that the vulnerability of existing silos in the near future, and I quote, "is not a sufficiently eminent part of the ICBM modernization." And that you say today, Mr. Secretary, on page 10 of your testimony, that, "It is now clear that the search for a survivable basing mode was an illusion."

Now my question would be to perhaps enlighten the committee a little bit more as to how this new proposal to place the MX in existing silos redresses this illusion of survivability.

Secretary WEINBERGER. Mr. Chairman, there are two problems with the existing Minuteman missiles in their silos. One is the problem of survivability that you addressed. The other is that they do not have the accuracy or yield to destroy Soviet hardened targets. The MX missile will correct that, and it will be the only U.S. missile that has that capability. And it is the one that is farthest along in development. We have invested over $5 billion and 12 years into its development and construction. It can have its initial operating capability in 1986 if the Congress approves. That will correct one part of this problem, a problem that we have needed to correct for some years.

As far as survivability is concerned, as we have indicated, the accuracy of Soviet missiles coupled with the insufficient hardening of any of our targets, gives them an ability to take out a large part of the ground-based leg of our triad. It is essential, for that reason, to modernize and strengthen. Because of the Soviet accuracy in-

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creases, the Commission recognizes we can not tomorrow secure the degree of survivability that we would like. It suggests a number of different ways of going about this over a somewhat longer term. One of them is to study and apply, if the studies proved feasible—and we think they will—means of hardening both the vehicles for the small missile which would be developed later as another part of their recommendation, and also the feasibility of hardening minuteman silos, or the ways of encapsulating the MX Peacekeeper missile in the existing silos. Both of those would add to ICBM survivability.

MAINTAINING MODERN TRIAD

The Commission also points out that one of the ways you help secure survivability is to force the Soviets to divide their forces by maintaining a modern triad.

We cannot cure survivability by putting the MX Peacekeeper missile in the existing Minuteman silos. We do cure the deficiencies of the Minuteman, and with the other Commission recommendations we can make significant advances toward improving the survivability. But if we continue with the modernization, as the Commission urges, of all the legs of the triad as the President has directed, then by having a strong modern triad we have increased survivability of each of the legs.

Chairman HATFIELD. Mr. Secretary, then, as I understand what you are saying, you would then not see any inconsistency with your statement today and that made in 1981, which you have been quoted as saying you did not believe at that time that by simply putting MX missiles into existing silos that that would in effect cure any problem or provide us surviability?

Secretary WEINBERGER. No, I do not think that there is an inconsistency because, as I said, by simply putting MX missiles into those silos you won't do that, but by doing that plus the other things that we are doing now, including development activity in the whole field of hardening, we have the opportunity to improve substantially survivability. But if we just put them into the silos alone and do nothing more, then I think the statement is correct.

SILO VULNERABILITY

Chairman HATFIELD. So while they are in the silos and before they have achieved the other things they are vulnerable?

Secretary WEINBERGER. Yes, they are vulnerable because of the Soviet accuracy.

Chairman HATFIELD. Does that then put us on first-strike position to save them, in other words, use them or lose them?

Secretary WEINBERGER. No, sir.

Chairman HATFIELD. What is the value? It still takes two Soviet warheads to knock out the present warhead, it will still take two Soviet warheads to knock out the one with the MX missile.

Secretary WEINBERGER. That depends on the degree of accuracy that they are continuing to achieve by their increasing attention to this whole issue and the new missile that they are now deploying. Nothing is static in this field. What is essential to bear in mind is that we have a no-first-strike basic policy. We don't attack first. We

have a defensive policy and we must, therefore, be ready with retaliatory capability, and it is that retaliatory capability that improves by having a missile that, to the extent it survives in the ground, is able to damage Soviet hardened targets that cannot be done now. That adds to deterrence just as improving the submarine-based leg and modernizing the bomber aspect.

Chairman HATFIELD. In that time frame, for whatever amount of time that is, there is, as I indicated and underscore again, a question that they are vulnerable.

Secretary WEINBERGER. They are vulnerable if you do nothing more. But if you do what the Commission recommends, and that is study very intensively the concept of hardening. Between now and 1986, we have opportunities to do quite a lot of work in hardening. We expect to do it. We have asked for sums of money to do it in excess of $450 million. And that concept will come at the time that this hardening principle can be applied very shortly after deployment, if indeed hardening proves to be as feasible and promising as it does now.

COMPLICATING SOVIET PLAN

Chairman HATFIELD. Mr. Secretary, on page 9 you indicated this will complicate the Soviet plan.

Secretary WEINBERGER. That is correct.

Chairman HATFIELD. If you will describe to me just how it will complicate the Soviet plan before these other actions are taken.

Secretary WEINBERGER. It will complicate it because they will know that we will be developing it at the same time as the new B–1 bombers with fast base escape and the Trident submarines with the D–5 missile that will improve accuracy and the hard-target-kill capability of our SLBM's. The problem that we have referred to right along, and which you are now identifying, Mr. Chairman, is that until we accomplish all of these things, we do not have the kind of strategic balance that maintains deterrence, and we will complicate their planning by developing all three at once. We should have been maintaining and modernizing all three legs over the years so that we don't have to do it all at one time. But now we have a problem of trying to do everything required now, because we haven't been doing it over the years. If we do it, we complicate their planning because then they have three separate forces with different characteristics that they have to try to take out. And if we, for example, give up the ground-based leg and say it is vulnerable and we can't do anything about vulnerability so we will let you have that one, then we enable them to concentrate on submarines or entirely on our bomber force.

Chairman HATFIELD. The complication is not really putting the MX missile into the silos, the complication for the Soviet Union is contingent upon the whole package you are asking for, in effect.

Secretary WEINBERGER. The complication for the Soviet Union is indeed dependent on the whole package, but each part is equally important and equally vital. If you drop one out, you uncomplicate their task.

COMMITTEE RESPONSIBILITY UNDER RESOLUTION

Chairman HATFIELD. That is the key. But I am trying to separate this committee's responsibility today. We are not involved here today in the rest of the package. We are involved in one part of the resolution that was introduced to approve the first amount of money on a basing mode. That is where we have to clearly and precisely identify this committee's immediate, present responsibility.

Secretary WEINBERGER. Mr. Chairman, you and I seem to have different ideas of the subject of this hearing. Since you are chairman of the committee, it may be that yours is more precise than mine.

Chairman HATFIELD. Have you read a copy of the resolution.

Secretary WEINBERGER. Yes; but I wanted to point out in consideration of that resolution, which is limited in scope because of the continuing resolution language last December and does by its terms apply only to the MX, that the President has said repeatedly that a vote for the resolution of approval which refers only to the MX carries with it, as far as he is concerned, a binding commitment on his part to submit to the Congress all of the recommendations of the Scowcroft Commission.

Chairman HATFIELD. I am sure of that. But that is not binding on the part of the committee. The President may feel bound to give us the full package, and we welcome it and will consider it. I am saying the only thing binding on this committee is to make a determination on the release of this money on the basing mode of the MX missile being approved or recommended to the Congress.

Secretary WEINBERGER. That is indeed the narrow language of the resolution of approval that is before you. That is because the terminology in that resolution was spelled out in the statute and cannot be amended. It is highly privileged and just has that one specific reference.

Chairman HATFIELD. So I wouldn't want to attempt to amend the Resolution because I think there may be members who will vote on it who are not in opposition to making a determination on the rest, and there may be members who would make exception to some of the recommendations based on what the MX missile will do and will not do under the question before the committee.

Secretary WEINBERGER. Again, it emphasizes, Mr. Chairman, the importance that the President and the Commission attach to the Commission's recommendations both with respect to the MX and everything else being considered as an integral part of a larger plan. That is why it is essential to keep in mind that the President, the Joint Chiefs, and the Department, all formally support the entire recommendations of the Commission, one part of which is to put the MX into these silos and proceed with all these other things.

Chairman HATFIELD. I welcome the opportunity to clarify because I wouldn't want a vote of this committee, if it does vote, to be assumed by the administration that the committee has committed itself to anything beyond that question.

Secretary WEINBERGER. I don't think we would ever make any assumptions about that.

Chairman HATFIELD. Thank you, Mr. Secretary.

Senator Stennis.

HISTORY OF MX APPROVAL

Senator STENNIS. Mr. Chairman, I will be brief. I just want to raise a point I am beginning to have some doubts about. We first approved the preliminary steps in the MX, we called it a new start on an ICBM, back in 1973. Some of the young people in the back of the room were 7 years old then. They will graduate from high school this spring.

I think the first approval given was in the Armed Services Committee of the Senate. But anyway, we are discussing this issue. As I say, in 1973, Mr. Nixon was President, and then Mr. Ford, then Mr. Carter, and now our present President, and they all agreed on moving in this direction. We have Joint Chiefs of Staff, and I don't know how many members we have had since 1973. They have all recommended to move in this direction. I don't know of any that have changed their minds. Do you, General?

General VESSEY. I don't know of any, Senator.

Senator STENNIS. And we have had some excellent men as Secretary of Defense, excellent. My recollection is all of them have recommended that we need it and that it would be a good move. And now we have our present Secretary who has testified here, and we have appointed a Commission—and I thought that was a splendid move—a Commission to make a special study of the missile and how it was to be operated. Now the Commissions has come back with a plan. The present President of the United States says, I need this plan approved, in the affirmative. I don't want him to go to the negotiation table emptyhanded, he needs to have something to negotiate on, and agree on if possible.

We have very capable people that will vote on this issue. I look around. There are very few of us that were here in 1973. We have gotten a high talent level since then with a lot of new Senators that have made contributions to this and other subjects.

MAIN VALUE OF MX IS DETERRENT STRENGTH

But we have got to take action. There is only one step we can take on this and that is to move torward, move forward or tell these people to get out of the way—and we are not going to follow that course. I think the main value of the MX is the deterrent strength. That is the way I see its value. Without it, we are buying trouble, without some type of additional ICBM capability. This is to be part of the triad, as I see it, according to the expert testimony. I leave all the technicalities to someone else, but this is practical commonsense. It seems to me we have to lay aside doubts and move forward on this or just say, frankly, Mr. President, that is all in this field, see what his reaction is to that.

So I have no complaint. I just think we are about at the end of the rope. I especially appreciate our chairman of this committee's work on this matter.

Gentlemen, I have been to most of your hearings. This morning, with all due respect to you, I am not going to ask any questions.

Chairman HATFIELD. Thank you, Senator Stennis.

Senator Stevens?

POSITION FOR START TALKS

Senator STEVENS. Mr. Secretary, I am not interested in the negotiating position in the START talks. I know you may be getting tired of me making certain that everyone is in agreement with this goal. It is my understanding that we seek to reduce both the warheads by at least a third and hopefully to cut the missiles by half their current number in the START talks. Is that your understanding?

Secretary WEINBERGER. Yes, that is essential. The President wants very deep reductions and he asked for that as a start in the START talks. He has also asked for consideration in the second phase, in which we would come down even farther. He has requested that the negotiators try to get an agreement that the missiles and throw weight be considered, which again is a most effective means of measuring the destructive power of these weapons.

Senator STEVENS. The Nation seems to be torn apart by this debate that has just taken place in the House and over the country about the freeze. The administration is for a freeze as long as it is preceded by reductions as a result of the START talks, isn't it?

Secretary WEINBERGER. Yes, it is all a matter of time. We don't want to freeze while we are behind. We want to freeze after there has been equal and balanced reductions that are fully verifiable down to the point where there is again parity, and then have a freeze. But perhaps not even stop there, but keep going to lower levels. That has always been the President's goal.

Senator STEVENS. Has the President indicated formally in writing the acceptance of the Scowcroft Commission report?

Secretary WEINBERGER. Yes, many times, he has done so orally and on national television, and he has done so in private meetings. There is not the slightest question about his full commitment to the recommendations of the Scowcroft Commission.

Senator STEVENS. That report does not in fact require a revision of our bargaining position or stated position at START; does it not?

Secretary WEINBERGER. Inferentially it does, Senator, because it talks about the development of a new small missile. The new small missile with a single warhead would require a larger number of total launchers and a different means of counting. So that is required, that process of trying to revise and develop a START position that if fully consistent with the Scowcroft Commission recommendations is underway in an interdepartmental process right now. We are meeting on it with State, Arms Control and Disarmament Agency [ACDA], and various other people.

BUILD-DOWN CONCEPT

Senator STEVENS. In connection with that, there has been a considerable amount of discussion about the proposal—I think Senator Cohen articulates it primarily on our side—concerning the graduated build-down concept. Is that concept inconsistent with the administration's negotiating position now?

Secretary WEINBERGER. Well, it is a little hard to tell exactly what that entails. It is phrased in general terms and the degree of application it would have to all forms of nuclear warheads is not completely clear to me. But we are certainly examining it very

carefully because the basic goal the President wants to achieve, I think, is the same goal that the sponsors of that proposal have, and that is to have a major reduction in the number of nuclear weapons, and indeed all weapons. The President has given similar instructions to bargainers in discussions on the conventional side, and that is reductions by very deep, mutual, balanced, to bring us down to parity at much lower levels, and be fully verifiable. And that, I understand, is one of the goals of Senator Cohen.

Senator STEVENS. Certainly to the extent both the administration's position and the graduated build-down concept, seek reductions first before seeking any freeze, you have a consistency. They both seek a reduction concept, recognizing that we are not on a parity now.

Secretary WEINBERGER. That is right. They seek a reduction concept down to parity, but at a much lower level than would be the level, for example, if we went up to what the Soviets have now. We want reductions, we want to bring it out at parity, at much lower levels, with very deep cuts, but have it fully verifiable.

MX AS A BARGAINING FACTOR

Senator STEVENS. I wasn't here for all the testimony, but as I understand the testimony that was given here the other day in the opening portion of these hearings, the suggestion was made that rather than having the MX as one of the items in the bargaining process in Geneva, we don't need the MX, we could use the cruise missile and Pershing, particularly the Pershing, because that disturbs the Russians the most. If we did not have the MX, a prompt, accurate, land-based missile, would we, in your opinion, have the bargaining position that we should have to bring the Russians to an agreement for the total reduction in armament on their side and ours?

Secretary WEINBERGER. No, sir, I don't think we would. I don't think they would stay at the table or enter discussions if they knew we were giving up the ground-based leg of the triad. They would have then won by default, so to speak, and they could concentrate their resources on the remaining two legs. Assuming those were continued to be authorized, they would be in the position that would enable them to forestall or forego any discussion on the ground-based leg.

Senator STEVENS. Well, in order to be successful in such a negotiation without the MX, you would have to give up a portion of one of the other two legs of the triad, would you not?

Secretary WEINBERGER. We would indeed, yes.

Senator STEVENS. So it is essential for the administration to have the MX authorized and capable of deployment in order to have a freer chance of negotiating reductions in Geneva. Is that correct?

Secretary WEINBERGER. I think that is absolutely correct. I would only amend it to say that it is not only essential for the administration to have, it is essential for the country to have it.

Senator STEVENS. I agree with that.

ALTERNATIVES TO MX

With regard to the MX, the Commission discussed three potential alternatives: a common missile like the Trident D–5, a sea-launched missile; an upgraded Minuteman III, or the Midgetman. Of those three, which could we deploy first, and how do any one of those compare with the MX option?

Secretary WEINBERGER. I would like to ask General Vessey to speak to that because he is so much more expert in it than I am. But the common missile problem, Senator, is that you get what nearly always happens when you strive for commonality in these systems, and that is something that is less effective as a submarine-launched missile and less effective as a ground-launched missile. You would also have to start at the beginning because you don't have that now. We looked at commonality at very considerable length and evaluated the prospects carefully. I would much rather do it if we could get a single missile and thereby save a bit of money. But it turns out you would lose the characteristics of accuracy and hard target kill capability on the scale the D–5 will have with the submarine. And you will not regain the accuracy or hard target kill capability that you would need and have in the MX. You will also give up $5 billion that has been sunk into the development and, as Senator Stennis pointed out, 10 years of discussions, and a couple more years of development before that. So I don't think that would be in any sense a substitute. The new small missile is not yet a missile, it is a concept.

IMPORTANCE OF STRATEGIC TRIAD

Senator STEVENS. I respect General Vessey, but I want to pursue my original concept. If we went with any one of those three, we couldn't go to Geneva with a full deck, could we?

Secretary WEINBERGER. No, sir.

Senator STEVENS. If we are going to be able to negotiate to get good reductions, we have to have the triad?

Secretary WEINBERGER. I am in total agreement with that.

Senator STEVENS. Thank you very much.

Chairman HATFIELD. Thank you, Senator.

Senator Huddleston?

Senator HUDDLESTON. Thank you very much, Mr. Chairman.

WINDOW OF VULNERABILITY

Mr. Secretary, I am still somewhat curious about the fact that the window of vulnerability sort of flew out the window. The so-called window was the driving force behind the development of the MX, at least in the last few years. Now, the justification has become inducing the Soviet Union to take a more reasonable position or be more willing to negotiate at the bargaining table. That, of course, is a substantial objective in itself, if it proved to be the case. Do we have any kind of indication from the Soviet Union that the deployment of 100 MX missiles in the fashion recommended would move them toward the table, or is this just still a gigantic guess on our part, a gamble?

Secretary WEINBERGER. Senator, let me begin by saying I cannot agree with your first assumption that the window of vulnerability is no longer a valid concept. We spent quite a lot of time responding to Senator Hatfield with respect to the deficiencies in the existing system. The Scowcroft Commission unanimously recommended, with all the differing views of that Commission, that we proceed with all of the elements of the President's rearmament and strategic modernization program as rapidly as we can. That includes new submarines, new bombers, and the settlement of the basing mode for the ground-based leg of the triad. And that doesn't sound to me like a report of a commission that feels there is no longer any validity to the concept that we have a lot of catching up to do.

Senator HUDDLESTON. The Commission said that in the short term at least this vulnerability is not as great as might have been supposed in the beginning; in other words, confirming that we were talking pretty much in theoretical terms when we talked about the vulnerability of the Minuteman system.

Secretary WEINBERGER. It said the vulnerability of any one part of the triad, Senator. Whether or not any specific situation is going to last a short term or not, it is a fact that the Soviets through their buildup over the last 20 years have put themselves in the position where we have a lot of catching up to do on the strategic side. Now we can do it, but if we don't do it, we will have a worsening imbalance because they never pause. They are working right now on two new missiles. We have a lot of catching up to do, and that catching up takes a lot longer frequently than the short term and we have to use in the short term the best solution that we have. The best solution that we have is a new missile that will cure most of the problems we have now with the existing missile. We do not have an absolutely invulnerable place to deploy MX. There is a window of vulnerability, a need to catch up, or an imbalance, whatever you want to call it, that requires action. That action is what the President has been talking about for 2 or 3 years, and it was that action the Scowcroft Commission agreed must be taken.

With respect to your point about the bargaining and the negotiations, our assumption that we need, as Senator Stevens correctly pointed out, to keep the Soviets at the bargaining table, is simple based on a matter of simple reasoning that there is no reason whatever for the Soviets to agree to any reductions if they find that they can maintain the imbalance in their favor without any negotiations. They have to believe that they have something to gain from negotiations. If we have an inaccurate missile that cannot destroy their targets because of the yield, and they know that this country is not going to replace it, then there is no reason for them to continue negotiating. And that is what or assumptions are based on.

DEGREE OF SOVIET NUCLEAR SUPERIORITY

Senator HUDDLESTON. When you talk about the Soviet superiority in nuclear forces, are you talking about total nuclear capability of the Soviet Union versus the United States, or are you talking specifically about the land-based system?

Secretary WEINBERGER. I am talking about the requirement and necessity, Senator, of maintaining a strong modern triad that because of interoperability of forces is able to keep a deterrent balance. And if you let any one leg of that wear out in effect, or fall behind, then I think you are in a difficult situation. The position that we are in now is that the B-62's, the second leg of that triad, are about 25 to 26 years old.

Senator HUDDLESTON. But what you have said to the committee and what you are leading to now I suppose is that at this moment the Soviet Union is superior to the United States in strategic nuclear capability. Is that what you want the committee to believe?

Secretary WEINBERGER. What I am saying now, Senator, and I would like to be very clear, is I think because of our inactions over the last few years—and I don't blame anybody because I recognize the mood of the country which led to a lot of that we are now in the situation where our deterrent capability is not as strong as it should be. Our deterrent capability is the ability to respond to a Soviet first strike, and for them to know that we have the capability to respond to that first strike in such a way that will inflict the kind of damage on them that they would find unacceptable high, so that they would be deterred from making that first attack. It is very difficult to measure this by absolute calculation. The problem I have is that I am not allowed very much error.

Senator HUDDLESTON. I understand. We don't want any error. But that is still not exactly what you have implied, which is that they are at this point superior to the United States and that we don't have enough capability at the present time to deter.

Secretary WEINBERGER. We have, Senator, a need to improve our capability to respond and to retaliate in the event of a first Soviet strike against us. We have a strong need to do that. The other part of the problem is that it takes a long time to do that.

Senator HUDDLESTON. I understand; they are somewhat different questions, though.

Secretary WEINBERGER. I think that is the most precise response I can give you to the problem of deterrence which, as I say, is not measurable by very absolute calculations. And if we don't do enough, we will not know about it in time.

SOVIET CONCERN WITH CRUISE MISSILES

Senator HUDDLESTON. Your judgment then is that our development of cruise missiles and deployment of them, our moving ahead now on the B-1 bomber, the D-5 missile, has not been of any concern to the Soviet Union and they are only concerned about what we do with the MX?

Secretary WEINBERGER. No, sir, it is two things. It takes a long time to deploy. You mentioned the D-5. We won't have the D-5 until 1989.

Senator HUDDLESTON. The cruise?

Secretary WEINBERGER. The cruise missile is starting to come on line. As you know, the cruise missile is slow and does not have the capabilities or flexibilities of some of the others. So the thing I have to be worried about is what the situation is like today and tomorrow as well as in 1989. And it is today and tomorrow that I

worry about. The only thing we can do now, and the most rapid thing we can do, is to bring on to deployment the missiles we have invested $5 billion and more than 10 years of development into.

Senator HUDDLESTON. Do you think what it happening right now, including this discussion and the recommendation of the Commission, has anything to do with the latest proposal from the Soviet Union that we begin to consider warhead totals?

Secretary WEINBERGER. I think it has. The other thing it has to do with is the imminent deployment of the intermediate range missiles.

Senator HUDDLESTON. The Pershing II.

Secretary WEINBERGER. Yes, and the GLCM, both of which the Soviets are trying desperately to stop. That is because we see the overriding importance for continuing strategic negotiations.

Senator HUDDLESTON. Thank you.

Chairman HATFIELD. Thank you, Senator.

Senator Rudman?

Senator RUDMAN. Mr. Chairman, thank you very much.

ABSENCE OF U.S. FIRST-STRIKE DOCTRINE

Mr. Secretary, I believe that this whole debate here in the Senate, and possibly in the House, will come down to an evaluation of how this is viewed in terms of disarmament implications. I really think of the three major points for MX, the showing of national will, the influence on our Western allies, frankly, I don't think those are going to carry the day. If anything is going to carry the day, in my view, it will be its disarmament implications, and that is what I would like to talk about this morning for just a few minutes.

If I understood your statement correctly, and I have heard it from others, the United States has no first-strike doctrine. No President has ever said that. And what each President might wish to do and what he might be advised to do is one thing, but you said a few moments ago we do not have a first-strike doctrine.

Secretary WEINBERGER. Correct.

Senator RUDMAN. However, when you read their doctrine, particularly at the midlevels, it is fairly clear that preemptive strikes are part of Soviet strategies.

Secretary WEINBERGER. It certainly is. And you don't have to read the midlevel publication, Senator. It runs through not only the way they have armed themselves, but the strategic systems they build and keep, it runs through the hardening that they have done on their own military targets, the amounts they have spent to protect their leadership, and the civil population.

Senator RUDMAN. It seems to me that puts all American land-based missiles at total risk at all times. Obviously the Soviet Union knows us pretty well, they believe the United States will not launch a first strike. They believe it. We have said it. Our whole history would indicate that. Clear preemptive strikes are not beyond the realm of their military thinking. That being the case, the amount of heightened tension and imminence of war, it is almost a given that the Soviet Union would target all American land-based missiles, which of course would then put the other two

legs of our triad in force. But it seems to me our land-based forces are at enormous risk because of the difference in doctrine.

Secretary WEINBERGER. They always are. They are targeted right now, and everybody knows that. The problem is that you have to have deployed three effective, accurate, heavy yielding weapon systems in this field so that you will have complicated, by making much more difficult, the Soviet planning. If as you say they target and develop a capability of destroying a land-based system, which even if not destroyed—and this is a critical point—does not have the accuracy or yield that destroyed their target, and they know the United States is not going to do anything to correct that, then in effect we have given up one part of the triad and allowed them to concentrate all their remaining assets and planning on destroying the remaining two parts of the triad. Whether those two parts of the triad at the present time consist of 26 year-old bombers that are having increasing difficulty penetrating Soviet airspace and submarines that do not have at this point the needed degree of accuracy or yield, then you have what you call vulnerability, or what I call a very serious situation that needs to be corrected as quickly as possible. The Scowcroft Commission has agreed completely and recommended we do all the things that the President recommended last October 1981, to continue to do them as rapidly as possible, and to do more, to develop a new smaller missile with a single warhead, and also study hardness.

FUNDING OF SURVIVABLE SYSTEMS

Senator RUDMAN. Since we can agree by doctrine our land-based forces are at risk, doesn't that dictate to the United States because of the Government's doctrine to make sure the money we spend go into systems that are survivable, such as B–1, Stealth, Trident, and a truly concealable but verifiable Midgetman missile?

Secretary WEINBERGER. It certainly dictates that you do that, Senator, but it does not dictate in any sense that you give up on trying to improve the accuracy and yield of the ground-based system and its survivability, and that is what the other recommendations of the Commission do. Senator Hatfield seemed to think of them separately or at least that was perhaps the impression I gave him. The initial operating capability of the MX Peacekeeper will be 1986. We have very favorable development on hardening. We have had indications that we can achieve hardness that might exceed that of the Soviet Union. We want to proceed with that. We have asked for $450 million to pursue that concept further. Those concepts could also apply to protect the small missile. But we are not in any sense giving up the land-based leg of the triad. But if we let it sit without doing anything to it and continue to discuss for another 10 years what we should do for a task that takes almost 10 years, then we have indeed left ourselves in a very serious situation.

FREEZE AFTER PARITY

Senator RUDMAN. The third question I have, Mr. Secretary, you mentioned in response to a question from Senator Stevens that as far as the freeze was concerned your belief and the administra-

tion's belief of freeze after parity, and as a supporter of the Cohen-Nunn initiative I agree with that. I think I have a more definite idea of what that means, and we can talk about that sometime. But when you say a freeze after parity, you are saying parity in each of the three legs of the triad; is that correct?

Secretary WEINBERGER. I would want to be certain, Senator, that when we make the deep reductions that we want to make and the President wants to make, we will end up with forces that are equally balanced. That is, as measured by the most effective means of measuring, equal destructive powers—if you want to phrase it that way—so that we can maintain this credible deterrence that we must maintain given our strategy and tactics so that we can maintain at lower levels and be fully verifiable as we have discussed. To my mind that would be an ideal kind of arms reduction agreement. And it is that kind I know the administration and the President want to have.

SOVIET PROGRESS IN TRIAD

Senator RUDMAN. As a Soviet defense secretary, Mr. Secretary, you also would want parity, and they certainly could point to our sea-based and soon coming air-based legs and say they don't have parity.

Secretary WEINBERGER. Oh Senator, they are not lagging in these other parts of the triad. They have been doing a great deal of work over the years improving their sea-based forces and their ability to communicate with them. Right now they are developing the Blackjack bomber that has intercontinental range capabilities and is larger than the B–1. They don't pause. They don't make any kind of attempt to see if restraint will work or whether unilateral actions will work. They have never paused for 21 years, and that is why they are in the position they are now.

UNITED STATES/SOVIET GAP IN LAND-BASED FORCES

Senator RUDMAN. The SS–18 force presently deployed by the Soviets is 308 ICBM's and 3,000 SRB's. If even we were to deploy the hundred MX's next year, we would still have an enormous gap between our land-based forces and theirs. With the gap still existing, is the narrowing of the gap of any great significance?

Secretary WEINBERGER. Yes; the narrowing of the gap is of great significance because this says the goal is not one more warhead than they have, it is to have enough retaliatory power. That is the whole problem.

Senator RUDMAN. Thank you.

Chairman HATFIELD. Thank you, Senator.

Senator Inouye?

MX BASING

Senator INOUYE. In the statement of the General there is a phrase that says that we will field the MX in Minuteman silos while searching for a better mode. Would it be correct to describe this present proposal as a temporary gap filler, short term?

Secretary WEINBERGER. The phrase you just read was the one I believe the President used on October 1, 1981, when he made this recommendation initially. There has been full recognition that it is very, very difficult, given the accuracy of the Soviet missiles, achieved through the technology we have given them. As I mentioned in the opening statement, it is very difficult to find an invulnerable method of basing the ground-based part of the triad. But we continue to pursue it, and the new hardening concept proposal is something that we find quite hopeful in this area. If we can deploy and secure the development of these new vastly improved hardening concepts we are talking about, that will be a help.

There are other things the Commission talked about. One is the development of a small missile that would be mobile, perhaps as a single-warhead, but yet have intercontinental range. That might also require some hardening. We have sought some funds in accordance with the Commission's request for that aspect. They talked about other things, one being fratricide, and closely spaced basing, which the President, forced by a close timetable, suggested last year. Also, there is ballistic missile defense, which again is most applicable to closely spaced basing deployment. These are all things that have been talked about and things the Commission has suggested we continue to pursue. And we have to do that because yes, you are right, we don't have an invulnerable basing mode. But we need to deploy MX peacekeeper because what is deployed now, vulnerable as it is, does not have the accuracy or yield needed for destruction of Soviet targets which have been hardened.

TOTAL MX CONSTRUCTION AND DEPLOYMENT

Senator INOUYE. This resolution calls for 100 MX's.

Secretary WEINBERGER. Yes, sir.

Senator INOUYE. How many MX's do you have in mind after this?

Secretary WEINBERGER. For deploying?

Senator INOUYE. Yes.

Secretary WEINBERGER. None. A hundred would be the full deployment. We would need to manufacture more because of the test requirements and things of that kind. We would not plan to deploy more MX Peacekeeper missiles than the Commission has recommended.

Chairman HATFIELD. Would the Senator yield?

Senator INOUYE. Yes.

Chairman HATFIELD. How many do you plan to build?

Secretary WEINBERGER. Probably about 223 for all the test purposes. That is the normal ratio.

Senator INOUYE. Senator Rudman brought up the phrase that we use that our policy is defensive, not first-strike policy.

Secretary WEINBERGER. Yes.

Senator INOUYE. If that is the case, why is the President reluctant to say that publicly?

Secretary WEINBERGER. I didn't hear you.

Senator INOUYE. Why is the President of the United States reluctant to articulate that publicly?

Secretary WEINBERGER. I don't think he is reluctant to articulate it in any way. There is a certain natural reluctance about discussing anything connected with the release of nuclear weapons. As you can appreciate, it is and should be a classified subject. Since the essence of deterrence depends upon our ability to retaliate, there is indeed a necessary reticence that has to accompany most of the statements about the specific policies with respect to this. But our whole strategy, we have said repeatedly and we say it again publicly and every other way, is defensive in nature. We have agressive intent. We don't start wars. But we know the other side has the capability and has discussed publicly and openly the doctrine involving that, as Senator Rudman pointed out a moment ago, and that requires, if we are going to maintain an effective deterrent, that we must be fully aware of the capabilities of the other side and build our deterrence around them. Deterrence is a changing concept, depending on their changing capabilities.

FREEZE RESOLUTION

Senator INOUYE. If the U.S. Senate concurred with the House on the action they took last night on the so-called freeze, would this concurrent resolution be contrary to the intent and purpose of the freeze resolution?

Secretary WEINBERGER. Would the resolution of approval that you are talking about before the committee now?

Senator INOUYE. Yes.

Secretary WEINBERGER. Senator, I will have to say I have not seen the final version of the freeze resolution. It went through several convolutions. There were a lot of amendments that were passed on late last night. I would say any concept—and if this is embodied in the freeze resolution this would be an answer—that involves freezing and leaving things the way they are in the hope that something else will happen or that we can secure through negotiations some kind of reductions later to qualify would be contrary to what we believe is in the best interests of the United States right now. You should not freeze when you are behind, and at the moment we have a great deal of catching up to do in the way of regaining a deterrent capability. Not catching up to get one more missile, but to regain a deterrent capability. And anything that stops that process, given the length of time it takes, even if all the congressional approvals are received, is something I think would be very much against the best interests of the country and of our allies.

DOD POSITION ON RECENT ANDROPOV STATEMENT

Senator INOUYE. And finally, what is the position of your Department on the most recent Andropov report?

Secretary WEINBERGER. We think that it is encouraging, because there has been a change, that they are willing to count and measure by warheads as opposed to simply launchers, which was their pattern in the past. We think there are a lot of deficiencies with it, and we think the insistence on including the British and French systems, which are different kinds of systems, not intermediate range systems, has the possibility of bringing the negotiations ulti-

mately to a halt, as the Soviets very well know. They know the British and French have indicated adamantly, and in my opinion quite rightly, their refusal to allow their systems to be a part of the negotiations the United States is conducting with the Soviet Union on different classes of systems. But at least it is a forward step in the sense that they are willing to talk about warheads, which is a more effective means of measuring the destructive power of these missiles than simply talking about launchers, considering the huge degree of fractionation they have built into their systems.

Senator INOUYE. And finally, your best estimate at this moment says that the price tag will be $16.6 billion?

Secretary WEINBERGER. Yes, sir.

Senator INOUYE. Thank you very much.

Chairman HATFIELD. Thank you, Senator Inouye.

Senator D'Amato?

Senator D'AMATO. Thank you very much, Mr. Chairman.

CBO FIGURES ON MX IN MINUTEMAN SILOS

Mr. Secretary, just this year the Congressional Budget Office released a report which stated the 100 MX missiles in Minuteman silos would contribute 3 percent in 1990 and less than 1 percent in 1996 of all hard target warheads that would be expected to survive and be available for retaliation in the nuclear scenario considered most likely, that being a Soviet first strike occurring after some warning. Do you agree with those figures?

Secretary WEINBERGER. No, sir, I don't. I don't think they take into account two or three factors. One is they attempt to measure a rather difficult factor to measure and that is the accuracy of the Soviet missile system. Although it is very accurate, and is getting better, the main thing is it doesn't take into account some of the hardening concepts I mentioned this morning that might very well have an effect on the degree of their survivability. I would like General Vessey to comment on this, too, because of his greater expertise in this field. But it seems to me that that report is the kind of statistical approach to deterrence which isn't very safe.

General VESSEY. I haven't seen that study and I would be interested in the assumptions that went into that. But the important thing is that the MX warheads in 1990 will contribute almost 100 percent of our entire hard-target kill warheads no matter what the other assumptions are. That is what we feel is important.

U.S. ICBM SURVIVAL

Senator D'AMATO. General, what percentage of our ICBM's do you believe would survive a first strike launched by the Russians at these targets?

General VESSEY. When the missiles are first fielded, if we ride out the attack, it would be about 25 percent. Our Minuteman silos would be a little better than 30 percent if we ride out the attack.

Senator D'AMATO. So you have a feeling that there would be a 25-percent survivability?

General VESSEY. If we ride out the attack.

Senator D'AMATO. What leads you to believe only 100 MX missiles are enough, Mr. Secretary, to motivate the Soviet leaders to be more forthcoming at the bargaining table?

Secretary WEINBERGER. There would be as General Vessey point out, a survivial rate of possible 25 to 30 of these if we ride out the attack. You mulitply that by 10, and that together with the other legs of the triad, which by 1990 we hope will continue to merit your support, would then have a degree of retaliatory capability taken together that will I think be sufficient for deterrence. Again, as I said a moment ago, these are not subject to absolute, precise calculations. But we have to try to place ourselves in the position of what it is that will deter the Soviets with the knowledge that we would subject them to 250 to 350 very accurate, high yield warheads that do have the capability of destroying their targets as opposed to relatively inaccurate warheads, or at least less accurate, that do not have that hard target capability. That is a vast increase in deterrence and that is essentially what we gain by the MX plus whatever additional benefits we will get from the hardening, which were not in General Vessey's calculation. But certainly we believe the Scowcroft Commission recommendations should be pursued, and it looks very promising from what we have seen so far.

General VESSEY. The other point I would make which contributes to deterrence is the Soviets have no assurance that we will ride out the attack. We are not going to give them that assurance.

THREAT OF 100 MX MISSILES

Senator D'AMATO. Of course, all of the witnesses who have appeared to date have said the hundred MX's would not give us the capability to endanger the Soviet ICBM's. According to General Scowcroft, it would take a deployment of 300 to 400 missiles to seriously threaten all of the Soviets ICBM's.

Secretary WEINBERGER. If you don't do anything else with the rest of the triad. We don't want to rely only on the ground-based leg, and we emphatically don't want to rely on only the other two. It is all three modernized and strengthened legs that are essential. We have started on the other two. The Commission says keep it up, don't stop, do it just as rapidly as you can. But you have to do something, says the Commission, about this remaining leg of the triad. And we totally concur with that.

MX AS BARGAINING CHIP

Senator D'AMATO. Mr. Secretary, two final questions. You leave one with the sense, and I agree with Senator Rudman, that the strength of the argument for this ICBM is that it gives us a chip, so to speak, to take to the bargaining table, and you believe that the Russians would be more willing to negotiate with us seriously for nuclear arms limitations and reductions. Is that fair?

Secretary WEINBERGER. I do believe that, but that is not the only reason.

Senator D'AMATO. But you do feel it is important?

Secretary WEINBERGER. I feel that is an important part. I think the other part is it does give us the retaliatory strength we need. I

think it not only improve but it makes possible at the negotiating table the kind of result we all want.

MX AS SYMBOL OF AMERICAN RESOLVE

Senator D'AMATO. One of the concerns that I have, of course, is that the MX has become some kind of symbol of American resolve. I am wondering if its symbolic role will grow larger than its military and diplomatic roles?

Secretary WEINBERGER. My response would be it is symbolic of American indecision or the capability of resolving itself on any major issue. I don't think we should build it to demonstrate American resolve, I think we should build it because we need it. We need it militarily and we need it to strengthen our negotiating position.

Senator D'AMATO. What would the Soviets have to offer the United States in order for the United States to give up the MX deployment?

Secretary WEINBERGER. I would like to see the offer that the President has requested as part of his negotiating position. That is a very major reduction in the warheads that are the most destructive capability of these weapons, severe, sharp reductions on both sides, down to parity on both sides, that are fully verifiable, and that might involve onsite verification. If that kind of offer is forthcoming, then it is worth coming to the negotiating table, and that would be worth quite a lot.

Senator D'AMATO. Thank you very much, Mr. Chairman.

Chairman HATFIELD. Thank you, Senator D'Amato.

TOTAL MX COST

Let me interdict one clarification, Mr. Secretary. The $16.6 billion that is in this program, is that for the 100 missiles you plan to deploy or is it for the 200 you plan to build?

Secretary WEINBERGER. It is the entire cost for the system, including those that have to be built for test purposes but that would not be deployed. Only 100 would be deployed. But it is necessary, as you know, because of the amount of testing involved, that you need more than are actually deployed. But only 100 would be deployed, and the $16.6 billion includes the full cost of the system. There shouldn't be any misunderstanding, Mr. Chairman, with the fact that you are going to build more than you are going to deploy has any kind of connotation with deterrence or arms reduction. It simply is an essential degree of testing that you have to provide for in order to end up with 100 missiles deployed.

Chairman HATFIELD. I just wanted to make sure the bill was going to take care of the full 200.

Secretary WEINBERGER. Yes.

Chairman HATFIELD. The 100 for deployment and you are going to test 100 MX missiles?

Secretary WEINBERGER. Yes, a little more. There are a number of things that are involved in the deployment of a new missile system that cannot be predicted with full accuracy.

General VESSEY. And those missiles will be built over a period of years. They will be reliability test and training missiles that will be fired through the years the missile is deployed.

Secretary WEINBERGER. Again I would like to emphasize that this is simply part of a manufacturing process that is required to end up with 100. We are not going to deploy 200. We are not going to go into any kind of negotiations saying we have 200 or anything like that. One hundred is all that ever would be deployed.

General VESSEY. I think that is about 15 years' worth of training and reliability testing.

Chairman HATFIELD. Senator DeConcini?

Senator DECONCINI. Thank you, Mr. Chairman.

U.S. INDECISION ON MX DEPLOYMENT

Mr. Secretary, you said just a moment ago I believe something that the indecision of our Government to move ahead on this has complicated or perhaps put us in a weakened position. Is that a fair statement?

Secretary WEINBERGER. I think the best way I would phrase it, since it has encouraged the Soviets to think their plans for modernization and strengthening may very well never be matched in this country, and the gap we see there in effective deterrence will continue to widen in their favor.

Senator DECONCINI. And the decision that you and ultimately the President made not to proceed with the racetrack system certainly compounded that problem?

Secretary WEINBERGER. No, sir, I think what you have to have is something that when it is completed is directly viewed by the Soviets as an improvement. You also have to look at comparative costs in this important field. The costs of the racetrack system were something in excess of two and a half times, three times perhaps, the cost of this system. This was built into it because of all the environmental problems that were associated with it, there were almost certainties of delay. It was cancelled for a number of reasons. Every President has to base his actions to a considerable extent on his own feelings about such matters. He is elected by the people, and his feelings had never been concealed from the people.

Senator DECONCINI. I understand. But when you make those changes for all the good reasons you point out, you certainly enhance the Soviets' impression and perception that we can't make a decision and we can't stick to it, don't you?

Secretary WEINBERGER. I wouldn't say that cancellation of that system was accompanied on the same day—October 1, 1981—with the formal request for the proposal that is before you now, of immediately deploying the MX Peacekeeper missile in existing silos, also included was a request to proceed with a new bomber and proceeding after that with a more advanced and even more effective follow on SLBM for our nuclear submarines.

MX DEPLOYMENT IN TITAN MISSILE BASES

Senator DECONCINI. Mr. Secretary, isn't it true when the President made that announcement he said he was only going to deploy the MX in the Titan missile bases?

Secretary WEINBERGER. He said existing silos, the work that was being done was on the Titan missile silos, the effective ones were the Minuteman.

Senator DECONCINI. But wasn't it a valid interpretation that he was talking about the Titan bases?

Secretary WEINBERGER. One of the problems with the whole thing has been the interpretations given by so many people other than the President.

Senator DECONCINI. The President did not confirm upon being requestioned whether or not they were the Titan bases?

Secretary WEINBERGER. Not to the best of my knowledge. At that point we were investigating the suitability of existing silos, and we confined our remarks, to the best of my memory, to existing silos.

Senator DECONCINI. I remember differently.

OBJECTIONS TO DENSE PACK

General Vessey, could I ask this question. You reviewed the process through which objections to dense pack were expressed to the President by the Joint Chiefs, as I recall, and the Scowcroft Commission has now suggested that the multiple protection shelter basing mode is probably the best way now known to limit the vulnerability of the MX by forcing an attacker to deal with a multiplicity of targets. What are the views of the Joint Chiefs on the multiple protective silo basing mode, notwithstanding your total recommendation and concurrence with the Scowcroft Commission Report?

SOVIET LEVEL OF MISSILE WARHEADS

General VESSEY. Well, the first view was it wasn't going to be approved. Second, it provides some survivability to the missile at great cost. It can be defeated by what the Soviets are doing, that is, fractionating their missiles, adding warheads to the missile, once the Soviets get above a certain level of missile warheads——

Senator DECONCINI. What is that level, General?

General VESSEY. I have forgotten the exact number. I will be happy to provide it for the record.

[The information follows:]

MULTIPLE PROTECTIVE SHELTER (MPS)

The original multiple protective shelter (MPS) basing mode consisted of 200 MX in 4600 shelters. This system was designed to withstand a constrained attack of 2850 reentry vehicles with 50 percent U.S. survivors. It is estimated the Soviets would plan to use up to [deleted] reentry vehicles to defeat MPS. From the U.S. perspective, it would require over [deleted] reentry vehicles to negate MPS with a 2 on 1 attack.

CURRENT RATE OF SOVIET WARHEADS

Senator DECONCINI. And what do they have now?

General VESSEY. About 6,000, 7,000.

Senator DECONCINI. And I take it from the Joint Chiefs of Staff approval of this Commission report and from your statement saying that you wholeheartedly support it now, that this is an alternative as far as you are concerned but not the best for our national security defense if you had your druthers?

General VESSEY. No, I don't think so. I think when the Chiefs finished wrestling with this, after closely spaced basing seemed to

have been rejected, we came to the conclusion that this is in fact the best way to go.

Senator DECONCINI. This is better than any other system that would be less vulnerable?

General VESSEY. Considering the entire package, that is, improvement in command, control, communications, and warning, the improvements to the submarine-launched force, the addition of air-launched cruise missile——

Senator DECONCINI. Just talking about the MX vulnerability.

General VESSEY. Well, we came to the same conclusion the Commission came to. If you start looking only at the pieces, you get a poor view of the picture. You better look at the larger picture.

QUESTIONING OF MX PROGRAM

Senator DECONCINI. General, thank you.

Mr. Secretary, I guess you can gather from the questions that have been asked on both sides that although this Senator has been a supporter of the MX missile, now for the first time I really have questions about the reason we went into it in the first place. The vulnerability issue was sold to this Senator under the last administration—that we had to have a system that would make the MX less vulnerable. Now we have a system that doesn't provide survivability, but we are told we are trading it for an improvement in our strategic deterrence and we are in the long run going to make it vulnerable. I find some inconsistencies there, and I only say that I hope that your Department, the Defense Department, can indeed attempt to educate us, because I haven't been convinced even after reading the Commission report that we are moving in the direction of having an invulnerable MX missile. And if we are not going to have one, why not just jump over this part of our deterrence and move toward what you are talking about later and that the Commission is talking about later. The case hasn't been made, in my judgment.

Secretary WEINBERGER. Let me try to explain. We would be glad to do it by other briefings if you prefer.

The problem is you need to have, as the Commission said and we fully agree, three effective legs of the triad. At the moment we have one of those legs of the triad in which we have not started our modernization. We have started on the other two and we hope that it continues. We haven't started on our ICBM force. There are two aspects needed for this modernization. One is to have a more accurate, heavier yield missile, the MX Peacekeeper. This missile has been developed over the years with at least $5 billion spent on it and which would have its initial operating capability in 1986. We do have a gap at the moment that needs to be closed as rapidly as possible. Given the fact that the Soviets have the accuracy that they have, any ground-based system has a high degree of vulnerability. It is important that accuracy and yield is corrected by obtaining a better ground missile and at the same time making it as invulnerable as possible. One of the ways to strengthen its invulnerability is the other legs of the triad. Another is hardening. The Commission recommends both. We certainly can't accomplish it all, but quite possibly we can accomplish some by 1986, when the ini-

tial operating capability of this missile is scheduled. The other alternative, is to do nothing and give up this leg of the triad, this would announce to the Soviets they have a sanctuary that is free from any attack by a ground-based ICBM system and allows them to concentrate on the remaining two legs of our triad. But as they acquire that ability to concentrate, it then gives them greater possibilities of succeeding. Any yes, the earlier MPS system was discontinued because it tended to play to their strong suit, fractionation. They can get a number of warheads on their large missiles. The earlier system is enormously expensive and was subject to very great delays that we do not believe are part of this recommendation.

Senator DECONCINI. Thank you, Mr. Secretary.

Chairman HATFIELD. Thank you, Senator.

Senator Andrews?

Senator ANDREWS. Thank you, Mr. Chairman.

BARGAINING CHIP THEORY

This has been a most intriguing, if not a strange morning. You talk, Mr. Secretary, time after time about this chip to go to the bargaining table I have been through that before, back when you were Cap the Knife talking about cost effectiveness, and we spent $4.5 billion that was shut down within 30 days because it became a chip on the bargaining table. Now I guess in terms of constant dollars you are coming up with a $16 billion bargaining chip, about the same as then, that you are going to use. Is that cost effective?

Secretary WEINBERGER. Senator, that is totally wrong. It is not just a bargaining chip.

Senator ANDREWS. You mentioned bargaining chip.

Secretary WEINBERGER. No, sir, the bargaining chip came from that side of the table. I agree it would improve our bargaining position but I tried to emphasize that we did not intend it only as a bargaining chip.

Senator ANDREWS. Then the next thing you said is it is an interim basing mode that will be used for 4 or 5 years.

Secretary WEINBERGER. No, I said that it was essential to get the missile into the ground as quickly as possible so we would have the opportunity to harden it and make it less vulnerable. But the worst thing is to do nothing.

Senator ANDREWS. But what I gathered from it was you didn't know yet if you had a basing system you had confidence in. You are asking us to spend $16 billion for a weapon system to go into an interim basing mode and perhaps be used as a bargaining chip?

Secretary WEINBERGER. No, sir. I said, and as General Vessey pointed out, even in a worst case scenario, where we are attacked by a very large number of accurate, hard target kill missiles, there would be some surviving missiles on which we could rely should we ride out an attack. It is not just a bargaining chip in any sense of the term. And I certainly had no participation in the cancellation of the ABM system. I thought it was a mistake. I did not believe it was in any sense destabilizing, but there were a great many people in the Congress and the executive branch who seemed to feel this was something that should be canceled or was inherently destabi-

lizing in developing deterrence. This President doesn't feel that way. I don't feel that way.

COST EFFECTIVENESS OF MX

Senator ANDREWS. They said in the case of the ABM system it was no longer cost effective when it was limited to 100 missiles. Do we have the same consequence with this?

Secretary WEINBERGER. The reason it was limited to 100, because it is reasonably effective for very small closely spaced targets. That is the reason the President, under the pressure of a very tight deadline by the Congress, last December recommended the closely spaced basing concept. One of reasons was it was easily defensible. His original recommendation, which the Congress rejected in 1981, was to do what we are recommending this morning and what the Scowcroft Commission has recommended in its report.

Senator ANDREWS. You mentioned, and they are your words, you talked about two problems of Minuteman III. The first problem you hit was survivability. Then you went on to say your MX decision doesn't cure survivability. Well, Mr. Secretary, how does this help our situation vis-a-vis the Soviets if we put 1,000 warheads down in holes where 300 are now situated that are totally targeted by the Soviet Union? Don't we give them more bang for the buck? Do we give 3½ times as many of our warheads held there to their incoming target missiles?

Secretary WEINBERGER. No, sir, I failed rather dismally in my ability to communicate to you the reasons why you——

Senator ANDREWS. You communicated. You said the biggest problem with the Minuteman system was vulnerability. You said that MX did not cure the vulnerability situation. You said the Soviets can target those Minuteman silos. And then you said, I think, unless I wasn't listening for the last hour and a half, that we were going to put MX missiles carrying 10 warheads apiece down in the same holes that are now targeted, holding missiles that have three warheads. That looks like cost effectiveness for the Soviets but sure as hell not for our taxpayers.

Secretary WEINBERGER. I am afraid you were out of the room during——

Senator ANDREWS. I was not out of the room.

Secretary WEINBERGER. Then I will try again, Senator, because what I said, was there are some vulnerability problems that remain because the Soviets have a degree of accuracy that we have given them that makes any unhardened system vulnerable. I also said the Commission recommended, and we endorsed, the need to study and incorporate—and we have very great promise we can see—improvements that will make this system less vulnerable. Now you can leave Minuteman missiles in those hardened, improved silos and you have reduced their vulnerability, but you haven't taken care of the second part of the equation. The second part is you maintain your deterrence by having in the ground not just missiles but missiles that have the accuracy and yield to destroy Soviet hard targets. That is why it is essential to look at all these recommendations of the Commission.

SOVIET PREEMPTIVE FIRST STRIKE

Senator ANDREWS. Another thing you pointed out, Mr. Secretary, that stirs a good deal of interest, you talked about the fact that the Soviets have made common knowledge of the fact they might move ahead with a preemptive first strike. If they move ahead with a preemptive first strike, and again these are your words, they have done a lot more with civil defense than we have, and when you are talking about spending money for new silos or hardening silos, because you just admitted the old ones aren't capable, have you given any thought to locating these silos in a new basing area so the fallout that would come would drift out to sea instead of covering a third of the United States? Has anybody taken a look at the fact that the Soviets have first strike capability, by your words; second, that these are probably the most attractive targets you can get; third, we haven't done much for civil defense, then you add all that together, wouldn't it suggest a new basing area be found so the fallout would drift out to sea instead of covering the contentinental United States?

Secretary WEINBERGER. Senator, there has been before you since 1981 recommendations from the President that we do improve our civil defense capabilities. There are also recommendations by the President which we are undertaking immediately with a very high priority for effective defense against incoming missiles. We are going to devote very considerable efforts, and I hope the full resources of our very considerable scientific community in trying to solve that entire problem. But you also must have in mind, sir, that the location of the missile has a great deal to do with their ability to hit targets, otherwise you do not have any deterrent value about them whatever. Locations of the missiles were not chosen haphazardly and were not chosen for reasons for anything other than putting them in the most effective location.

The other factor in all of this is that you have to look at those silos which are most effective and lend themselves from every point of view to hardening. The silos that have been chosen for MX Peacekeeper missiles are the silos that are most capable of adapting to new hardening techniques.

Senator ANDREWS. Well, it looks to us like you have got a missile without a hole. Some time ago we were talking about the MX debate in the Senate, and I pointed out you seem to have the Rolls Royce coming on line and you haven't picked the garage yet. It looks like for this new MX you want to get off the line that you are talking about dumping into whatever you have available, are your own words. Mr. Secretary, if this system doesn't cure the survivability question you yourself raised about the silos, I hope you give some thought to the idea of a different basing location to protect some rather than saying in some distant time two decades hence we may have the ability to stop these incoming missiles and therefore protect this massive new system we are putting on line.

Secretary WEINBERGER. Senator, if you pursue those general arguments you end up where we are now, with raising all the possible objections to everything proposed and the result, is that 10 more years will elapse while the objections are analyzed and, we will not have done anything to improve our current situation. We

do say the missile sites we have selected are the most effective, and that one of the reasons for doing that is to get the deployed missile into the ground, after $5 billion and 10 years of debate. You should put it where it can serve its purpose, which is to deter attack. You then have between now and the time it will be deployed to make the silos as invulnerable and safe as possible. We will have better means of doing that, to develop a small mobile missile that will be even more survivable. The fact that there has been a number of proposals made and some rejected I don't believe is an agrument for doing nothing.

LAUNCH UNDER WARNING SYSTEM

Senator ANDREWS. One final question, Mr. Secretary. When you are putting all of these sophisticated, tough target-busting warheads into missile systems that are now targetable, and admit as much to the public and Soviet Union, don't they have a mind set that says we are moving that much closer to a launch under warning type procedure in this country? Doesn't that move us that much closer to hair-trigger when we put our best warheads, our best missiles hostage to Soviet missiles that are already targeting those silos? This is one of the other things that bothers me and I haven't had that answered. Isn't that going to give them the feeling they have to get those before we launch them and they are going to be launched under attack?

Secretary WEINBERGER. Senator, I have not been able with any degree of success to get inside the Soviet mind or know what it is they think. I have to try to do that with respect to the degree of deterrence that we have to regain. My own conclusion is that the most dangerous situation for the United States is to debate and do nothing and encourage them by showing them that we are never going to be able to resolve or move in any area. And I think they have, as you said earlier, a certain mind set. The have to understand that we have a degree of retaliatory capability that will make them not only think twice but will deter them from making that first strike. That is why it is essential we modernize all three elements of the triad quickly including the ground-based leg with a missile that has accuracy and yield, and I think it can be done.

Chairman HATFIELD. Your time is up, Senator. You have gone 3 minutes over.

Senator ANDREWS. Mr. Secretary, one of the reasons I feel this is looking glass like let me quote, Mr. Chairman, what the Secretary said not too long ago on January 6, 1981. You said, and I quote, "I would feel that simply putting it into existing silos would not answer two or three of the concerns that I have, namely, that these are well-known locations, are not hardened, nor could they be to have a sufficient strategic value to couple a strategic improvement of our force." This is why we are confused on both sides of the table.

Secretary WEINBERGER. That quotation has been read to me at least——

Chairman HATFIELD. Let me interject. The matter has already been put on the record. The Secretary has already responded to that.

Senator Bumpers?

SUBMARINE AND BOMBER LEGS OF TRIAD

Senator BUMPERS. Mr. Secretary, let me follow up just a bit on the discussion you had with Senator Rudman. You said that we had a lot of catching up to do in the submarine and bomber legs of the triad, and you also said previously you agreed with the Commission report. The Commission report states on pages 4 and 5 that the United States presently has a substantial advantage in overall capability in its ballistic missile submarine force, and it further states that the Soviet strategic bomber force is considerably less capable than the total active U.S. bomber force. I can't reconcile your assertion to Senator Rudman that we have some catching up to do and the Commission report which says we have substantial superiority in those two legs of the triad.

Secretary WEINBERGER. I don't think they said we had a substantial superiority.

Senator BUMPERS. Those are my words.

Secretary WEINBERGER. In the context of the time in which we have to deal, there is no question that we have a very capable submarine force. We are developing a missile for that force that would have the accuracy and yield to destroy their hardened targets. We have a large number of warheads that are submarine launched now, but if they do not have the accuracy or yield, then as of now we have to wonder how much of a deterrent that is to the Soviet Union, particularly when you take into account the difficulty of communicating with the submarines. What we will begin to have by 1989 are the Trident submarines with the D–5 missiles that have accuracy, yield, and survivability, unless we have allowed the Soviets to concentrate all their resources on the technology to destroy submarines.

D–5 MISSILE SYSTEM

Senator BUMPERS. We are planning on the D–5 having accuracy and hard kill capability?

Secretary WEINBERGER. Indeed, but we will get it by 1989. What I have been talking about is the situation as it exists right now in 1983 and how it will look in 1984 and 1985 and what we can do about it. And we also have to look at what the Soviets are doing. Right now they have many Backfire bombers which weren't counted in SALT, but they also have under development the Blackjack bomber, which clearly has intercontinental capabilities.

Senator BUMPERS. We hope to deploy the B–1 about the same time they deploy the Blackjack bomber, do we not?

Secretary WEINBERGER. We do. But the important point I want to make is that we have to continue with what is a hard, difficult, expensive, and basically unpopular course. My concern is that we will do as we have done before. We will begin and then we will stop, in the hopes that the Soviets will not deploy, and maybe they will exhibit self-restraint, and maybe they will come to the negotiating table, but then we will find ourselves in the situation we are now. There is no doubt the B–52 has been a very fine plane. There is also no doubt that Soviet interceptors are being deployed every

day. There is no question about the increasing difficulty for the B-52 to get through Soviet air defense. The B-52's can make that part of the triad extremely vulnerable. So we have not just looked at what it is in May 1983. We have to look at how long it will be until we can change the present conditions—areas that the Soviets are moving on and have built up great momentum over the years.

TIMEFRAME FOR D-5 AND MX MISSILE DEPLOYMENT

Senator BUMPERS. Mr. Secretary, let me ask you about the timeframe. For deployment of the D-5 missile, we are looking at 1989. Now the $16.6 billion figure you have given us for deployment of the MX, does that include hardening?

Secretary WEINBERGER. No, we have asked for an additional $415 million for the superhardening concept. If that should prove to be feasible and capable, I think that we should proceed with it. I don't have a precise estimate as to what it would be, but it would be something that would give much greater survivability to the MX in the silo.

Senator BUMPERS. Does that change the date of the final deployment?

Secretary WEINBERGER. No, sir.

Senator BUMPERS. It will not delay it?

Secretary WEINBERGER. No, sir.

Senator BUMPERS. So your present timetable is to harden, test, and deploy the missile by 1987?

Secretary WEINBERGER. 1986 for initial operating capability in the existing silos, 1989 for full operating capability, assuming we can proceed this summer.

Senator BUMPERS. So we are getting roughly 2 or 3 years' advantage from the MX prior to the initial operational capability of the D-5.

U.S. SURVIVAL RATE FROM SOVIET ATTACK ON LAND-BASED MISSILES

Now let me ask you several other questions, Mr. Secretary. In December of last year, you testified before the Armed Services Committee that we can only anticipate a survival rate of about 5 percent should the Soviets attack our land-based missiles. Four months later, General Gabriel testified that the survivability rate would be 30 percent. I am not here to argue about whether you or General Gabriel is correct. You said before, and I couldn't agree more, that these are imprecise figures.

Secretary WEINBERGER. We are both correct. We are talking about different years. General Gabriel is talking about present conditions. I am talking about this time period we have to work when we can get something deployed. And what we have to worry about is not just what it is today, it is what will happen if we do nothing and the Soviets continue improving the accuracy of their missiles. They are constantly improving their missile capabilities. As I said, they have two new ones and they are working on another one right now. If we look at tomorrow, General Gabriel, General Vessey, and I are all in agreement. I believe that we are all correct to the extent that anybody can tell, about 30 percent. If we are talking

about 1987 and we do nothing, then we are down to a much lower number. It is that need to do something now that will get results.

Senator BUMPERS. Let's put the best face on these estimates. Let's assume 30 percent survivability for our land-based missiles, and compare the number of surviving hard target kill warheads that would result if we modernized our remaining 250 Minuteman III's instead of deploying the MX. If we don't deploy the MX, but simply modernize the 250 remaining Minuteman III's, we will have 1,650 hard target kill weapons. If we deploy 100 MX's you get a total of 1,900 land-based hard target kill warheads. And if you use 30 percent survivability rate, the difference between modernizing the Minuteman III and going with the MX as you are proposing to do, is only 75 more surviving warheads. So for $16.5 billion we get 75 additional survivable warheads. General Gabriel also testified that the Soviet Union has 2,000 hard targets. Therefore, we are going to have 75 more warheads as a result of the deployment of the MX than we would have if we modernize the Minuteman III, at a cost of $16.5 billion, plus the cost of hardening. They will still have 2,000 hard targets, and we have 75 more hard target kill warheads.

Secretary WEINBERGER. Let me try to dispute not only your mathematics but some of your assumptions.

The modernization of the existing Minuteman missile is not going to give you anything remotely resembling the capabilities of the MX missile. So you can't consider them as capable or equal in any sense. What you have to look at is improvement, far more accurate warheads, more capable of hard target kill, which is MX, you also have to look at what effect the hardening will do to survivability. The hardening would also protect the vulnerability of the Minuteman. But you shouldn't expect to protect something with only limited capability in the future. So what you do is put in one that has a hard target kill capability and that has an early operational date and protect it as best you can.

HARD TARGET CAPABILITY OF MINUTEMAN III

Senator BUMPERS. Does the Minuteman II have hard target capability?

Secretary WEINBERGER. No.

Senator BUMPERS. I'm sorry, the Minuteman III.

Secretary WEINBERGER. No, sir.

Senator BUMPERS. The MK-12A warhead does not have hard target kill capability?

Secretary WEINBERGER. No, sir, not with the degree of hardening the Soviets have, and the limited accuracy of the Minuteman.

Senator BUMPERS. Why on earth did we modernize?

Secretary WEINBERGER. It is better than what we have now.

Senator BUMPERS. You mean it may be better, but it still won't do the job.

General VESSEY. We did it because it was a hard-target killer when fielded, but the targets have gotten harder.

Secretary WEINBERGER. The Soviets don't stand still.

Senator BUMPERS. I understand that. As a matter of fact, I don't think we have fully completed the modernization of the Minuteman III.

General VESSEY. Yes, it has been completed.

Senator BUMPERS. Have we just wasted our money?

General VESSEY. No, we haven't. When we say hard target kill, that is sort of an arbitrary definition. It has a 50-percent probability of a single-shot kill on a target that can withstand overpressure of 2,000 PSI.

Senator BUMPERS. I understand.

General VESSEY. Now there are a lot of hard targets in the Soviet Union that are not as hard as that. There are all sorts of targets that don't have 2,000 PSI protection. And certainly you can attack a target with 2,000 PSI protection with Minuteman III and use more than one warhead, and certainly you get increased capability.

Senator BUMPERS. We still use two warheads per target, don't we, with Minuteman?

General VESSEY. On many targets we use two warheads, yes, sir.

Chairman HATFIELD. Senator, your time is up.

Senator Specter?

Senator SPECTER. Thank you, Mr. Chairman.

Mr. Secretary, I compliment you on your patience in responding to the questions.

Secretary WEINBERGER. Thank you

U.S. STRATEGIES ON FIRST STRIKE

Senator SPECTER. I was interested in the comments that General Vessey made about the strategies of the United States in not initiating first strike. There has been a great deal of concern about the MX being vulnerable and being a potential first-strike weapon—use it or lose it, as our chairman commented about earlier. But I think from testimony today, which has been the most precise statement I have heard, that the administration is submitting this plan for the MX on the statement it is not the administration's intent to use the MX as a first-strike weapon.

Secretary WEINBERGER. That is correct. A first-strike weapon is a weapon used first, and you stated our intention correctly.

Senator SPECTER. Would it be accurate to say beyond that it is the administration's policy generally not to use nuclear weapons as a first strike?

Secretary WEINBERGER. That is correct.

COMMITMENT TO SILO HARDENING

Senator SPECTER. I have been interested in your expansion of the hardening commitment. You have come back to that repeatedly during your testimony this morning. In the Scowcroft Commission Report there is a section on page 9 about super-hardening, and the essence of it is that, "eventually the survival of even the hardest such targets would be doubtful in light of the accuracy of the prudence described above." Do you have some new information available independent of the Scowcroft document that would suggest hardening would be an extra protection which would insure surviv-

ability of the MX missile? Is that essentially something new you are telling us today?

Secretary WEINBERGER. Not since the publication of the report. But the Commission goes on, "Nevertheless, increased targets woud raise the weapons requirements of the Soviets and the risk of attack for some years." Modernization will also postpone vulnerability. There is no way that anybody can guarantee to you that there is an invulnerable method of deploying these ground-based missiles. That was lost when we handed the Soviets all the technology for accuracy. But we can do a great deal to improve survivability. We can force higher attack levels by the Soviets. What we are talking about here is regaining the deterrent.

Senator SPECTER. So the bottom line is if the Soviets want to really wipe out the MX forces given the hardening capabilities we have, they can do it?

Secretary WEINBERGER. But in doing that they make it impossible for them to deal with the B–1B, and D–5 equipped submarines when deployed, if we continue to fund and deploy them.

PARITY AND INFERIORITY

Senator SPECTER. Mr. Secretary, there has been a great deal of comment on parity and inferiority, and this also is a changing concept. I believe that you have said in the past when asked directly if you would trade all of the nuclear forces of the United States for all of the nuclear forces of the Soviet Union, let me not paraphrase, you would take such a trade.

Secretary WEINBERGER. You are talking about nuclear forces, which mean missiles and men. Several members of the Joint Chiefs have said from time to time they would trade the missile force, but they would never trade them in men because we don't want a lot of Soviet soldiers wandering around our country.

NUCLEAR FORCES

Senator SPECTER. I think Senator Simpson is going to clear that with the immigration law.

On nuclear forces, given our triad versus their triad, is it a fair statement you would trade?

Secretary WEINBERGER. Senator, these are all hypothetical evaluations. The point I want to make is that we do not now have the degree of deterrent capability that we should have. We are in a situation in which the deterrent that we think is necessary has been eroded by our failure for one reason or another to modernize or strengthen all three parts of the triad. The President's program is to modernize and strengthen all three parts of the triad, and we are embarking on that with two legs and we will be regaining capabilities toward the end of the decade. It is essential that we also modernize the land-based system. We can speculate about trading this and trading that. I think it is apparent the Soviet missiles are more accurate than ours and in many situations more numerous, and therefore our deterrent capability has been eroded. We are not trying to acquire a first-strike capability. We are nor trying to ac-

quire anything other than the ability to continue to maintain the peace by deterring attack.

Senator SPECTER. Mr. Secretary, I would suggest to you that it is not a hypothetical question, it is a question of great importance, because when we face the overall issue on a freeze as opposed to arms reduction, when you come to the Congress and say we want the MX missile to bring us up to parity with the Soviet Union, I think we have to know whether there is parity or whether there is inferiority. That is a question which is posed to me consistently. And I talked to you about this when you were before another committee. The issue is public support, and this issue is raised repeatedly in the land that we are not inferior to the Soviets, and that is why I press you just a bit.

Secretary WEINBERGER. Senator, I don't mind being pressed at all because what we are talking about are different missions. We have said what the Soviets talk about in their direct and internal publications and indicate in their actions. And we haven't mentioned one of the others, and that is a refire capability. They use the same launchers for additional missiles. In all of these strategies we know they are at least planning for, or thinking about, or developing the capability for launching a first strike. So when you are talking about exchanging forces, you are not talking about the same thing. Our mission is to have enough retaliatory capability, so they would know if they launch the first strike, that we would have sufficient strength to retaliate and inflict a sufficient degree of cost to them so they would say "that is too high for us to bear," and "we can't make that first strike now and we had better wait awhile." That is why I find it difficult to do these measures of exchange you talk about. We feel we do not have enough now as of today, to be critical about that deterrent, and that is why we think we have to do some more and are glad the Congress has authorized at least two parts.

Senator SPECTER. Mr. Secretary, I can't paraphrase that answer for my constitutents. Are we inferior?

Secretary WEINBERGER. I would very respectfully say you should not try. You give it in text. Because I think the danger comes from the simplifications that are required by headlines and 90-second spots on the evening or morning news. You can't simplify those issues in those sorts of terms. We do need to deter attack. We don't think we have the degree of capability to do that sufficiently given the difficulty of measuring things now, we think we need more.

Senator SPECTER. Mr. Chairman, I was given the 2 minute warning 2 minutes ago so I will not pursue the question, but I will simply say in conclusion that the next time I am asked, I will have the transcript and I will read it to my constituents. And I am reasonably confident they will understand, even though I don't.

Chairman HATFIELD. Thank you, Senator.

Senator Leahy.

Senator LEAHY. Thank you, Mr. Chairman.

MK-12A WARHEAD

I think Secretary Weinberger gives us good advice in saying we should not try to oversimplify these complex issues, otherwise we

could run the risk of making statements like "window of vulnerability" and things of that nature.

Mr. Secretary, is the MK-12A warhead on the Minuteman III?

Secretary WEINBERGER. It is on some.

Senator LEAHY. Are we still putting it on Minuteman III?

General VESSEY. The MK-12A's are all deployed.

Senator LEAHY. Is that basically the warhead that is going on the MX?

General VESSEY. No.

Senator LEAHY. It would be a different warhead on the MX? It won't be the Mark 12A?

General VESSEY. It will not be the Mark 12A.

GROUND FIRE HITS MARINE HELICOPTER IN LEBANON

Senator LEAHY. Mr. Secretary, just one thing before I go into my questions. I saw something on the wire services and I understand there have been a few inquires to my office. A helicopter carrying the commander of the U.S. Marines in Lebanon was hit by machinegun fire today. Apparently he is unhurt, but the helicopter was hit. Do you know anything about that?

Secretary WEINBERGER. Just roughly what you have said, sir, that a helicopter was hit by ground fire. The helicopter was not brought down by the fire, but three rounds I believe did hit.

Senator LEAHY. Thank God he is OK.

Secretary WEINBERGER. As far as we know he is.

Senator LEAHY. Where did that fire come from?

Secretary WEINBERGER. It took place I believe about 7 kilometers southeast of the center of Beirut.

Senator LEAHY. Do you have something to add?

General VESSEY. That is the right answer.

Senator LEAHY. Who holds that position?

Secretary WEINBERGER. That is a position that is not occupied by the multinational force. The multinational force has certain fixed positions and they patrol around those fixed positions.

Senator LEAHY. Does anybody control that position?

Secretary WEINBERGER. I really don't know. And "control" is one of the least terms you can use in Lebanon.

Senator LEAHY. I understand. I was just trying to find out who was shooting at us.

Secretary WEINBERGER. I don't know.

INCREASED SOVIET ACTIVITY IN CUBA

Senator LEAHY. We have heard a lot of claims of increased Soviet activity in Cuba. I get letters from constituents who ask what we are doing to respond to that. Members of Congress have spoken about it. Are you monitoring the Soviet activity in Cuba?

Secretary WEINBERGER. Yes, sir.

Senator LEAHY. And during the last 2 years has there been increased Soviet activity in Cuba?

Secretary WEINBERGER. Very much so. Last year was the largest round of military shipments to Cuba for any year in the last 20.

NUCLEAR WEAPONS IN CUBA

Senator LEAHY. Are there Soviet nuclear weapons in Cuba?

Secretary WEINBERGER. Not that we know of definitely. There are nuclear-capable aircraft that are there, but whether they are so equipped or not I don't know.

Senator LEAHY. Do we have any indication there are nuclear armed missiles in Cuba?

Secretary WEINBERGER. I am not able to answer that, sir.

Senator LEAHY. You are not able to answer because you don't know or because it is classified?

Secretary WEINBERGER. Because I don't know.

Senator LEAHY. So are you saying there could be nuclear missiles in Cuba and we wouldn't know it?

General VESSEY. There are no indications there are nuclear arms in Cuba.

Senator LEAHY. I am confused, General, because I am not sure whether you and the Secretary are giving different answers.

Secretary WEINBERGER. We are not.

Senator LEAHY. If I could finish my question

Secretary WEINBERGER. All right, sir.

Senator LEAHY. Would we know if there are nuclear armed missiles in Cuba, 90 miles off our shores?

Secretary WEINBERGER. It is possible that prior to the deployment nuclear arms could have been brought into Cuba under conditions which we would not know if specifically they were there or not. But I don't believe I want to go further with that answer in an open hearing. General Vessey may want to add something.

General VESSEY. I would just say it is very, very unlikely.

Senator LEAHY. But you do feel that there are airplanes capable of carrying nuclear weapons in Cuba?

Secretary WEINBERGER. Yes.

Senator LEAHY. And are these airplanes designed primarily to carry nuclear weapons?

Secretary WEINBERGER. I don't think it would be fair to say they are designed primarily for that.

Senator LEAHY. Would you say something like our B-52 is designed primarily to carry nuclear weapons?

Secretary WEINBERGER. Yes, that plane is designed primarily for that purpose. It also carries other weapons.

Senator LEAHY. I understand. The Soviets also have long-range bombers which, while they could carry conventional weapons, are designed primarily for nuclear weapons.

Secretary WEINBERGER. The situation changes from time to time. There isn't any totally standard situation. If you are talking about whether they are based there, I don't have any information that they are based there. But the situation is a moving picture, so to speak.

Senator LEAHY. Would you say the Soviets——

Chairman HATFIELD. Would the Senator withhold. Senator, there is a 5-minute warning bell on a vote. You have about 4 minutes left in your interrogation. I would like to have you take the gavel for the rest and the Senator from Wisconsin, and we will go and vote and we will tell them you are on your way. If the Secretary and

General would wait for another 10 minutes, the Senator from Wisconsin, Senator Kasten, will be back to have his round of questions. I will not be. But I want to thank you, Mr. Secretary and General, for your appearance here today.

Secretary WEINBERGER. I would like to thank you, Mr. Chairman and members of the committee, for the courtesy here and careful attention that has been paid to these extremely difficult issues.

Chairman HATFIELD. Thank you

SOVIET ACTIVITIES IN CUBA

Senator LEAHY [presiding]. Mr. Secretary, why are we allowing the Soviets to increase their activities in Cuba?

Secretary WEINBERGER. The increased activity Senator, consists of vastly increased shipments to Cuba. The activity doesn't consist of a massive increase of Soviet troops or anything of that kind. But the conditions you have been questioning me about have been present in differing degrees over the years. But the thing that has increased is the amount of Soviet military equipment that has been shipped to Cuba.

Senator LEAHY. I recall that was a major issue during the 1980 campaigns. The attitude of some of my constituents—and admittedly I come from one of the most conservative States of the Union—is, as somebody wrote in a letter, "None of this would happen if Ronald Reagan was President." What is happening? Was it just rhetoric in 1980 and we really don't care what goes on?

Secretary WEINBERGER. No, I think President Reagan is respecting American public opinion.

Senator LEAHY. The American public opinion obviously supported the position that we ought to stop those Soviet increases in Cuba. Why aren't we?

Secretary WEINBERGER. I do not recall any campaign promise to start a war with Cuba.

Senator LEAHY. I do not suggest we go to war with Cuba, Mr. Secretary. I am seeking to find out if we are facing a threat to our security by increased Soviet activity in Cuba?

Secretary WEINBERGER. We are finding conditions that require increased surveillance, increased readiness, increased preparations, and increased conventional and strategic strength that we have sought from the Congress.

Senator LEAHY. Are we finding increased threat to the security of the United States by Soviet activity in Cuba?

Secretary WEINBERGER. I would say whatever increases of Soviet supplies of military equipment to Cuba passed through to Nicaragua to support the guerrillas in El Salvador certainly complicates the defense of the continental United States.

Senator LEAHY. Are we finding an increased threat to the security of the United States by the increase in Soviet activity in Cuba?

Secretary WEINBERGER. As I said, we are, and we called the attention of the public and Congress to it. We have also sought ways of improving the capability of El Salvador an elected government to defend itself against aggression.

DEFENSE POSTURE OF EL SALVADOR

Senator LEAHY. Are we counting on El Salvador to protect the security of the United States?

Secretary WEINBERGER. We are certainly planning to increase the capability of El Salvador to defend itself against aggression, and one of the ways we hope to do that is to help them deny the funding of additional supplies through Nicaragua from Cuba, from the Soviet Union, to the people who are in effect clients of the Soviet Union.

Senator LEAHY. Perhaps I don't make myself clear, Mr. Secretary. If the increased Soviet activity in Cuba is a threat to the security of the United States, are we going to face that threat to our security or are we relying on El Salvador?

Secretary WEINBERGER. I wouldn't think that is a fair characterization, certainly not of their army units that have been trained in this country. Part of the President's request, a large part of the military request, is to train additional units. We are certainly trying in a number of ways to do the things that are necessary to protect the United States. But bear in mind, Senator, the difficulty the President is having in even getting from the Congress the approval to help the El Salvadorans help defend themselves.

Senator LEAHY. Maybe we are comparing apples and oranges. We are getting off the subject.

Secretary WEINBERGER. I was trying to respond to your questions about Central America.

Senator LEAHY. I am primarily concerned about the threat to our security from Cuba. As one who has strongly supported maintaining our base at Guantanamo and as one who has expressed a great deal of concern in the Intelligence Committee for a number of years, with two different administrations, about what the Soviets might do, I must say you do not give me a great deal of comfort. But to explore it further we would have to do that in a closed session.

MULTIPLE PROTECTIVE SHELTER BASING SYSTEM

Senator DeConcini asked you about the basing method that he had supported for MX, the multiple protective shelter basing system, and you answered that that played to the Soviet strong suit. Why wouldn't 100 MX in 100 well-targeted silos do that even more?

Secretary WEINBERGER. The important point, Senator, is you have to get deployed as soon as you can the capability of responding and retaliating. The quickest way, and therefore the best way, that we have available is to deploy the missile on which we have invested the most money and time, and will add to our deterrent retaliatory capability as soon as possible. No one can tell you, and I am certainly not going to try, that it is invulnerable. It does have problems of vulnerability. On the other hand, it has the advantages of an effective ground-based system, as effective as possible given the Soviet capability.

Senator LEAHY. Doesn't that still play to what you call the Soviets' strong suit?

Secretary WEINBERGER. No, I don't think so, Senator, because it leaves us with the resources to do what we are doing with the other two legs of the triad. It offers us the possibility, and I think the very real hope, of increasing the hardening aspects I mentioned that we do not now have available.

RELEASE OF NUCLEAR WEAPONS

Senator LEAHY. Doesn't launch after attack really give us the most protection for our missiles?

Secretary WEINBERGER. Again, I don't want to get into anything that involves the release of nuclear weapons in open hearing.

Senator LEAHY. No; I am talking hypothetically. The greatest security we have for our nuclear weapons still remains launch under attack.

Secretary WEINBERGER. I try to avoid, Senator, dealing with hypothetical questions. I would just like——

Senator LEAHY. We have been dealing with hypothetical questions, and as every Secretary of Defense has, you have done so this morning in answering questions.

Secretary WEINBERGER. Hypothetical questions involving the release of nuclear weapons, I think, is a particularly risky minefield to enter, and I would simply like to leave it if I could. I would be glad to discuss it with you in closed session. I would like to leave with you what we think is necessary to increase and improve our ability to retaliate, and to respond to a first strike. That is why it is so essential to do what we are urging this morning with respect to MX and also with respect to the other two parts of the triad.

Senator LEAHY. We will stand in recess subject to the call of the chairman.

[Brief recess.]

Senator KASTEN [presiding]. The committee will come to order.

Mr. Secretary, I just have a couple quick questions. I know you have been here all morning and I don't want to take any more of your time. I am serving on the Budget and Appropriations Committees. I guess I have seen you 3 or 4 times in the last 3 weeks. I couldn't help thinking just sitting here and looking at the first and second rows the unbelievable amount of time that you and your whole group at the Pentagon has to be spending on these limitless, endless hearings. Do you have any idea how many hours you put in during a month?

Secretary WEINBERGER. In February it was 36 hours. I don't know what it is in May.

Senator KASTEN. So if it is 36 hours for you——

Secretary WEINBERGER. That is 36 hours of testimony.

Senator KASTEN. So probably 100 Pentagon hours are going into it, either sitting here or writing the reports.

Secretary WEINBERGER. I usually put in two for each one of testimony because I don't want to come unless I have some preparation.

VULNERABILITY TO EXISTING SILOS

Senator KASTEN. First of all, just for the purpose of the record, Senator Andrews read a quote attributed to you, talking about the vulnerability of the existing silos, and I didn't hear your answer to

that. I just wonder for the purposes of the record now if you could just respond to the Senator's quote.

Secretary WEINBERGER. Existing silos, Senator, are unqestionably vulnerable. We have said so many, many times, and sadly it is true. It is true because of the Soviet accuracy, and as you may have heard, they got that accuracy from technology they took from us. What we hope the committee will do is to look at the other aspect of the modernization, not only are the silos vulnerable but the missiles in them are not as capable as they should be to deal with the newly hardened and continued increasing hardening of the Soviet targets. So we have to not only worry about the survivability of the target. Thus, we must work to improve both. One of the ways we could improve the survivability of the silos is to develop the silo hardening we have talked about, and the Commission has made several suggestions that would be very helpful. The other is to deploy a more capable missile. The only one we have is MX.

HARDENING OF MINUTEMAN SILOS

Senator KASTEN. It is important we don't leave the impression that the Minuteman silos will be used as they are. It is my understanding that the 100 MX missiles are going to be deployed in Minuteman silos, which themselves are going to be improved and hardened. Is that correct?

Secretary WEIBERGER. That is certainly one of the hopes we have and one of the things we would ask Congress for. $450 million represents our estimate to examine the superhardening concept that the Commission asked us to develop. First of all, I would feel hopeful that the Congress would approve that. I would feel confident if they did that, the development of that in view of the very promising results we have had so far would lead to a situation in which we had a substantially improved survivability rate—that General Vessey discussed a few minutes ago—of the missiles deployed either in MX or Minuteman. But if you are going to do that, you should have the silos filled with the most capable missiles that can do the job.

DEVELOPMENT OF SMALL ICBM MISSILES

Senator KASTEN. Mr. Secretary, the Scowcroft report calls for the development of a small ICBM missile as the eventual basis of our land-based missile force. A number of people, including Mr. Turner and Mr. Bundy the other day, have expressed support for this weapon. Some people support the small ICBM because it doesn't exist. They support it for the same reason that they now support the Stealth, in my opinion. They are supporting the Stealth and saying we don't need the B–1. There is a tendency among the people who are opponents of these national defense systems to support one because it doesn't exist and use it to kill the one we have now.

Secretary WEINBERGER. I have not heard it better expressed. I agree with it completely.

Senator KASTEN. But there are others that sincerely support the small missile because of its survivability, and because it is less destabilizing than the large MIRV system. However, I am sensing

some concern on the part of a number of people that say frankly the Air Force is less than fully committed to the small ICBM, seeing it as competition to the MX. Now maybe that it just rumor. I will finish my question and you can respond to all the different parts.

The development of the first ICBM took 4 years from the start of the engineering to deployment, not including 2 years of early work on the components. This was accomplished at a time when we had very little experience in the field. According to some reports, the Air Force is now planning for an IOC of the mid- to late nineties for the small ICBM.

My question is this. Why will it take us 10 to 15 years to develop this missile, given where we are in terms of the development, and also given the fact that a year and a half ago you announced you would be initiating a number of measures that would streamline the whole weapons acquisition process and shorten the time of weapons development? Shouldn't we expect to reduce the time required to develop and deploy the small ICBM missile given where we are with technology, and given the changes that you have implemented?

Secretary WEINBERGER. Senator, I would hope we could, but I don't have any assurance of that. You are quite right it took only about 3½ years to bring the Minuteman system on line in the 1950's. I have asked that same question repeatedly and we get a variety of answers. One is it is more complex. One is our productivity has declined as a nation. Another is these are more difficult systems that involve the need for more complex development techniques and technologies because of the ways in which the Soviets have applied this technology to their military capability. And you have a long series of testing that is required and all the rest. The small missile is a concept at the moment, but it is one that is enormously important to pursue. We are going to pursue it as vigorously as possible. And I can tell you with complete authority that the Air Force is for this totally and unreservedly, as is the Department of Defense and Joint Chiefs, General Vessey can also speak to that point. The Air Force is a large organization, just as Congress is a large organization, and there may be some individuals who have not yet fully understood the position of the Air Force. But the position of the Air Force, the Department of Defense, the President, and the Joint Chiefs of Staff, is fully in support of the Scowcroft Commission report. And when I spoke at the very beginning of this hearing to the chairman, saying in my opinion a vote for the resolution of approval that is before you is not just a vote for the MX but also would indicate clearly, or at least the administration would hope that it would indicate, approval for the Scowcroft Commission recommendations, specifically including the small missile. We would certainly try to get on line as soon as possible. It isn't mid- to late nineties. My understanding is the early nineties. But bear in mind it is a new missile, it would be intercontinental, small, single-warhead, and with a mobile capability, and those are concepts we don't have now.

MOBILITY OF BASING SYSTEMS

Senator KASTEN. Let me follow on the last point. How much of the time delay is based on the technology of the missile itself and its development as opposed to the mobility of the basing system? Is there a problem in both places?

Secretary WEINBERGER. I don't think so. We have done some work on the transportability of the MX launcher under previous proposals. I would think that a fair amount of time would need to be spent on that because those means of deployment should be as hardened as possible to give this the greatest degree of survivability. We have in our proposal $150 million to study and develop a hard mobile option. But as far as the actual time that each would take, I don't know. Maybe General Vessey does.

Senator KASTEN. It just doesn't make sense to me to that it takes 10 years, let's just say just 10, if we did the other in 3.

General VESSEY. I think if we go to extraordinary methods, that missile can be developed faster. The Commission recommended starting engineering development now for a decision in 1987, and then see if we should go into full-scale development at that time.

Senator KASTEN. Do you think it is possible, General, for the Air Force to effectively develop two ICBM's at the same time? We are still going to be working on the MX.

General VESSEY. I think so.

RESPONSIBILITY FOR SMALL ICBM TO DARPA

Senator KASTEN. To insure there is no hold up in the development of a small ICBM, would you or the Secretary consider turning over the responsibility of the small ICBM to the Defense Advanced Research Project Agency [DARPA]? Or could we create a "missile czar" to cut through the redtape and get on with the program as quickly as possible?

General VESSEY. I don't think so.

Senator KASTEN. Do you think the Air Force could do both at the same time?

General VESSEY. Yes, they can.

Secretary WEINBERGER. Senator, let me say the full resources of the Department would be behind it. The Air Force would be in a sense the executive agent or managing agent. We would on a program of that importance, do what I am doing now with the B-1 and many other large systems, and that is to review the project every couple of weeks, checking to see if we are on schedule and determine what was holding us up, and what it is costing in overruns if they are a problem and to correct immediately those things.

On the timing, I share the frustration that you must feel about the length of time. When I first came on board, I ask if we couldn't do the D-5 sooner than 1989. It is not all that new. It does have a somewhat different guidance system than current submarine missiles, but why did we have to wait, at that point, 8 more years. After several months the study came back, if we wanted to go to a much higher degree of concurrency, we could get 1 year earlier deployment of the D-5 missiles but it would cost $1 billion more to do it. At that point it did not seem to be in any sense worthwhile. These things for one reason or another do seem to take a long

time. I agree with General Vessey, if the approval is given now, we could proceed with an intensive application of the available resources. I would very much hope that we could be able to get an IOC in the very early 1990's, and with any luck maybe a bit earlier than that. It is a concept. It is not now a missile.

SUBMITTED QUESTIONS

Senator KASTEN. Mr. Secretary, thank you. On behalf of Chairman Hatfield and other members of the committee, I would like to thank you and General Vessey for your testimony here today. There will be written questions that will be coming from certain members of the committee who could not be here. We would appreciate it if you could get back to us with the answers.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

Questions Submitted by Senator Andrews
(Response by Secretary Weinberger)

New Hardening Concepts

Question: The Scowcraft Commission reports that new concepts and developments to superharden ICBM silos are "quite promising". Can you elaborate on this?

Answer: Yes, what we are talking about is a [deleted]. The structural features mentioned above, and the multi-layer foam and liquidspring shock isolation systems inside the capsule will provide the Peacekeeper missile with a safe, survivable environment at a range of about [deleted] from high-yield energy detonations.

Decline of Survivability

Question: The report states that eventually the survival of even the hardest targets such as ICBM silos would be doubtful in light of MIRVed ICBM accuracy improvements by an attacker. How much time do you anticipate before the decline of their survivability?

Answer: Assuming a decision is made to build superhard silos using the best techniques known at this time, we would expect them to be survivable into the 1990's. By that time, we could be deploying a new small missile in a much more survivable mode, as recommended by the President's Commission on Strategic Forces.

Hardening Costs

Question: If 100 MX missiles are produced and deployed in the near term in Minuteman silos, with a later decision about hardening them, as recommended by the Scowcroft Commission, have there been any projections made on the cost of this hardening?

Answer: No projections have been made to date because the nature of the silo hardening effort is undetermined at this time. Estimates will be made when our research on hardening is more complete and we have a better concept of what specific hardness levels are reasonable and cost effective.

Justification for Hardening

Question: One message that seems to be implicit in the Commission Report is a recognition that all land-based systems are vulnerable. If the Soviet 10 warhead SS-18 is so accurate, why would we bother to harden the MX in Minuteman silos?

Answer: The President's Commission on Strategic Forces recognized the ultimate vulnerability of ICBM systems based in fixed, surface positions. That is quite different from an indictment of all land-based systems. To answer your question, however, we now believe we can achieve hardness levels much higher than previously envisioned, high enough to provide good survivability well into the 1990's. By that time, we expect to

be able to deploy a small missile in a much more survivable manner.

Single-Warhead ICBMs

QUESTION: For the near term, the Commission has recommended 100 MX missiles in Minuteman silos. For the long term it recommends development of small, single-warhead ICBMs. The Defense Department has indicated it is not adopting an anti-MIRV position by supporting the Commission's long term recommendation of 1 reentry vehicle instead of 10. How serious are our arms control strategists about encouraging the Soviets to move toward the single-warhead ICBMs instead of the MIRVs. If we are serious, how realistic do you think this type of proposal is?

ANSWER: The President's ICBM modernization plan is based on a realistic assessment of the evolving strategic environment and reflects his deeply-held desire to achieve a real stabilization of the U.S.-Soviet nuclear relationship. There are, for instance, indications of Soviet interest in assuring the future survivability of their ICBM force through such means as mobility rather than continuing to concentrate solely on further development of their huge fixed MIRVed ICBMs. Our vigorous pursuit of the development of a small single warhead missile may very well encourage this development and thus aid the realization of a START agreement. But this will require our commitment to deploy both Peacekeeper and develop a very small single warhead missile. As my predecessor, Harold Brown, wrote in his letter accompanying the Scowcroft Report:

> "The parallel single warhead ICBM program would offer a prospect of mutually reduced ICBM vulnerability if the Soviets are brought through MX deployment program to move away from large fixed MIRVed ICBMs, either by negotiations or by their own concern about the vulnerability of their ICBMs."

Questions Submitted by Senator D'Amato

(Response by Secretary Weinberger)

Morality of Nuclear Deterrence

QUESTION: Please explain your views on the morality of nuclear deterrence, in light of the American Catholic Bishops' newly approved "Pastoral Letter."

ANSWER: Our policy of deterrence has preserved peace and freedom for nearly 40 years, and will continue to do so if we maintain a strong, modernized Triad -- including a modern ICBM force. The morality of preserving peace and freedom speaks for itself. And I would note that the Bishops also determined that deterrence is a moral policy.

Nuclear Deterrence

QUESTION: What is nuclear deterrence and how does it work?

ANSWER: Our policy of deterrence prevents aggression and coersion against the United States and our allies by presenting any potential aggressor with costs which will outweigh any gains he might hope to make through an attack. Deterrence rests on our capability to respond

flexibly and credibly across a wide spectrum of potential conflict -- conventional as well as nuclear. We have the capability to respond to any level which an aggressor might choose, we dissuade him from attacking in the first place.

What Is Enough

QUESTION: How do we decide what forces are enough to deter the Soviet Union from starting a nuclear war?

ANSWER: Successful deterrence rests on maintaining sufficient military force -- both conventional and nuclear — that we present a potential aggressor with the reality that we will be able to respond to any level of attack he might contemplate. Because our is a retaliatory strategy, and because our potential adversory possesses a wide range of offensive military options, it is especially important that our forces be flexible, able to threaten that which the enemy values most.

Maintenance of Credibility

QUESTION: Do you believe we must continue to maintain an ability which is credible in the eyes of Soviet military planners to destroy with certainty those Soviet facilities, personnel, and capabilities which they value most in order to sustain our ability to deter war?

ANSWER: Yes. This capability is the essence of deterrence.

Important Soviet Assets

QUESTION: How do we decide which facilities the Soviet Union values most? Is the degree to which they are hardened, dispersed, and defended a good indicator?

ANSWER: The Soviet leadership has demonstrated clearly over the past two decades, in its writings and in its practice, that it places great value on its military power, its ability to control the Soviet Union, and on its ability to sustain war. The hardening, dispersal and defense of these assets is one of the important indicators that the Soviets mean what they say about their importance.

Hard Target Destruction Capability

QUESTION: In your view, how important to the future viability of our deterrent is a hard target destruction capability?

ANSWER: It is essential that we possess the capability to hold at risk what the Soviet leadership places highest emphasis on preserving. The Soviet hardening effort is an attempt to deny us that capability. This, if unaddressed, risks undercutting deterrence because the Soviets could come to believe that they could emerge from a major conflict with their forces, control, and war supporting capabilities, intact. Thus we must be able to hold these targets at risk. As a result, it is crucial that we proceed to modernize our Triad, including our ICBM force, because we currently lack an ability to threaten credibly prompt retaliation against hardened Soviet targets. Deployment of Peacekeeper as part of the President's proposed ICBM modernization program is, therefore, vital.

Soviet Hard Target Numbers

QUESTION: Has the number of hard targets in the Soviet Union increased or decreased in the last two decades?

ANSWER: The number of hard targets in the USSR has increased dramatically over the last two decades.

Status of Soviet Target Base

QUESTION: What has happened to the dispersion and physical hardness of the Soviet target base over the past five years?

ANSWER: The Soviet target base has been dispersed and hardened to a high degree over the past two decades. Over the past five years, the pace and scope of this activity has increased significantly, and it is continuing.

U.S. Ability to Stage Disarming First Strike

QUESTION: If we deployed the full complement of MX and Trident D-5 missiles now planned, in your opinion, would this mix of forces give us the ability to stage a disarming first strike during the time period in the future when their deployment was completed?

ANSWER: Absolutely not. We are under no illusion that we could ever execute a disarming first strike against the USSR. Furthermore, we do not seek, nor will we develop, such a capability because our strategy has been, is, and will remain, a retaliatory one.

Deterrence From First Strike

QUESTION: In your view, would the existence of Soviet bombers and SSBNs deter us from attempting a first strike?

ANSWER: As I have indicated already, we would never execute a first strike because it is not our policy to do so. Furthermore, we could never develop a capability to make a disarming first strike on the USSR because of the size and varied nature of its nuclear forces.

Soviet Assessment of Success of Nuclear Attack

QUESTION: How important is the Soviet system of active and passive defenses for the political, military, and economic personnel and activities which constitute the core of the Soviet state to their calculations of the likelihood of success of any nuclear attack against the U.S.?

ANSWER: Our ability to deter Soviet aggression rests on our capability to hold at risk that which the Soviet leadership values most highly. This includes their ability to control the Soviet state. The large Soviet investment in active and passive defenses is an important indication of the value the leadership places on its own survival -- and is a sign that we must be able to continue to hold it at risk despite that investment. This means, of course, that we must continue to modernize our Triad, including the ICBM leg, in the face of Soviet efforts to blunt the effect of our retaliation.

Soviet Investment in Defense

QUESTION: Because the Soviet Union has invested so heavily in both active and passive defenses for their people, their economy, and

their military forces, and we have not made anything like as large an investment in our own defenses, does it take relatively more U.S. offensive striking power of a qualitatively better sort to deter them than it would take to deter us, all other things being equal?

ANSWER: The USSR does not need to deter the United States: we plan no aggression against it or any other state. Our policy is manifestly a defensive one, and our force structure provides clear evidence evidence of this. With regard to Soviet defenses, those defenses are designed to blunt the retaliatory potential of our forces. As a result, we must maintain a modernized Triad which is capable of responding credibly in spite of Soviet efforts to blunt our forces.

Soviet Offensive Strike Ability

QUESTION: According to Soviet Military Power, 1983, the Soviet Union has stockpiled reload ICBMs and has constructed tunnels to protect its nuclear submarines. Do you believe that these actions have given the Soviet Union the ability to reconstitute its strategic nuclear offensive striking force after launching all of the weapons which were supposedly counted and controlled by the SALT agreements in a first salvo?

ANSWER: The Soviet Union is clearly seeking an ability to reconstitute its nuclear offensive forces. This is one reason why a U.S. retaliatory strike must be able to destroy hardened Soviet silos, in order to prevent the Soviets from believing that those silos could be reloaded and reused.

Military Significance of Soviet Defenses

QUESTION: Are these reload ICBMs and submarine tunnels militarily significant?

ANSWER: Yes.

SALT and Reload ICBMs

QUESTION: In your view, should we have negotiated SALT so that these reload ICBMs were either counted or prohibited?

ANSWER: Our proposed START initiative would palce limits on reload ICBMs.

Reconstitution

QUESTION: Does the U.S. have any similar capability to reconstitute its offensive strategic forces after the initial stages of a general nuclear war?

ANSWER: The U.S. ICBM force is "hot launched" -- that is, the silo itself is unusable without major repair. In effect, there is no reload capability. The USSR can "cold launch" a major portion of its ICBM force -- the ICBM itself is expelled from the silo before the boosters are ignited, and the silo remains intact. This allows the USSR a reload capability in hardened silos.

ICBM Open Production

QUESTION: We do not now have an open ICBM production line or an open bomber production line. How important is it for us to have stra-

tegic delivery systems in productions as a hedge against a Soviet decision to break out of arms control limits?

ANSWER: An open production line allows the U.S. a timely response to Soviet initiatives, and therefore deters their seeking any unilateral advantage by a rapid arms build-up. The open production line, therefore, also gives incentive for serious negotiations; otherwise, the USSR would see no reason to negotiate when the U.S. through unilateral restraint, could muster no response to a Soviet disinterest in arms control. The open production line also allows timely modifications to offset Soviet defensive efforts.

Soviet Break Out

QUESTION: If the Soviet Union were to decide to break out of arms control limits by simply forging ahead with ICBM production and deployment, using a well-designed strategic deception plan incorporating a propaganda "peace offensive" against Western public opinion and elected leaders, are you confident we would have conclusive evidence of their decision to break out so we could react before they had acquired a dominating lead in strategic forces?

ANSWER: One of our requirements for any arms control agreement is that it be verifiable. Any such agreement we would sign would provide adequate safeguards against Soviet cheating.

Verification of Soviet Compliance

QUESTION: We now rely upon "national technical means" for verifying Soviet compliance with the terms of arms control treaties. "National technical means" is a euphemism for highly classified intelligence gathering systems which produce a highly classified product. Since the key to being able to enforce arms control agreements is being able to react if they are violated, and a President must mobilize public opinion behind him in order to persuade Congress to act, is it wise to rely upon these national technical means for verification since the concrete evidence of violations they produce cannot be publicly disclosed and discussed without compromising highly sensitive intelligence sources and methods?

ANSWER: Verification is an essential element of any arms control agreement. We would not sign any agreement which was not verifiable and which did not provide sufficient safeguards against breakout.

World Perception of Strategic Strength

QUESTION: How important is the perceived strength (or weakness) of our strategic nuclear forces to our diplomacy?

ANSWER: Our strategic nuclear forces are widely regarded by friend and foe alike as a key indicator of our ability to deter aggression against the United States and our allies.

ICBM Modernization and NATO

QUESTION: What do you believe the impact of a Congressional decision not to deploy MX would be on the NATO agreement to deploy Pershing 2 and Ground Launched Cruise Missiles?

ANSWER: A failure to modernize our ICBM force -- including a failure to deploy the Peacekeeper -- could undercut not only the ability of key allied governments to muster and hold the political

support necessary to back the deployments of Pershing II and Ground Launched Cruise Missiles in their countries, but also could be seen as undercutting America's nuclear umbrella for NATO.

Impact of Failure to Moderize ICBM Force

QUESTION: What do you believe the impact of a Congressional decision not to deploy MX would be on the long term future of the NATO alliance?

ANSWER: Failure to modernize our ICBM force -- including a failure to deploy Peacekeeper -- could undercut the Alliance's efforts to deploy Pershing II and Ground Launched Cruise Missiles but could also be seen as undercutting America's nuclear umbrella for NATO. If either of these came to pass, the consequences for NATO could be extremely adverse.

Impact of Non-Deployment of Peacekeeper

QUESTION: What do you believe the impact of a Congressional decision not to deploy MX would be on our other friends and allies around the world?

ANSWER: A failure by the United States to modernize its ICBM force, in the face of a direct and conscious Soviet effort to place that force at risk, will undoubtedly affect the perceptions which other governments hold of us and of our ability and will to act in our own defense and in the defense of others.

Peacekeeper and START

QUESTION: Would a decision not to go ahead with MX improve or decrease our chances of achieving a fair, stable, and verifiable START agreement?

ANSWER: Failure to proceed with the President's ICBM modernization will weaken our ability to make the Soviets negotiate seriously on arms reductions, and, consequently will decrease our chances of achieving an arms reduction agreement. Since Peacekeeper deployment is the near-term step in the program, it is extremely important both to our arms reductions efforts and to our ability to maintain a strategic balance. Cancelling the Peacekeeper would remove a major incentive for the Soviets to negotiate in good faith in Geneva since their ICBMs and command and control structure would continue to enjoy immunity from a threat of prompt U.S. retaliation. Rather, in light of a cancellation of Peacekeeper, it is likely the Soviets would continue with their policy of seeking unilateral strategic advantage.

ICBM Modernization and INF Agreement

QUESTION: Would a decision not to go ahead with MX improve or decrease our chances of achieving an agreement in the INF talks?

ANSWER: As I noted earlier, failure to deploy Peacekeeper could affect adversely NATO's plan to deploy Pershing IIs and Ground Launched Cruise Missiles beginning later this year. And, as you know, deployment of those missiles is the essential element to achieving an agreement in the INF talks.

Peacekeeper Non-Deployment and START

QUESTION: What would a decision not to go ahead with MX mean for our START negotiating position?

ANSWER: Our START position has been based on the assumption that our strategic Triad will be modernized. Clearly, a change in a fundamental underlying premise will affect the proposal. Furthermore, failure to proceed with the President's ICBM modernization will weaken our ability to make the Soviets negotiate seriously on arms reductions, and, consequently will decrease our chances of achieving an arms reduction agreement. Sine Peacekeeper deployment is the near-term step in the program, it is extremely important both to our arms reductions efforts and to our ability to maintain a strategic balance. Cancelling the Peacekeeper would remove a major incentive for the Soviets to negotiate in good faith in Geneva since their ICBMs and command and control structure would continue to enjoy immunity from a threat of prompt U.S. retaliation. Rather, in light of a cancellation of Peacekeeper, it is likely the Soviets would continue with their policy of seeking unilateral strategic advantage.

U.S. Warheads

QUESTION: This week, the Congressional Budget Office published a study entitled "Modernizing U.S. Strategic Forces: The Administration's Program and Alternatives." In this study, the authors estimate we have 1,400 hard-target warheads today, and we will have 3,900 by 1990 and 6,700 by 1996. Do you agree with those figures? (p.3 of study)

ANSWER: The exact number of our warheads is, of course, classified. If the study -- which I have not read and, therefore, cannot comment on -- assumes that we have today the capability to attack with any degree of confidence such hardened Soviet targets as command and control facilities, ICBM launch facilities, and ICBM silos, then it is in error. The massive Soviet hardening program has denied us this capability today -- even while they built and deployed an ICBM force designed to threaten our Minuteman missiles with a first strike threat. Through twin developments the Soviets have undercut the stability of the nuclear balance, and it is to correct that that we must proceed with the President's ICBM modernizatin program.

Warhead Numbers

QUESTION: In this same CBO study, the authors assert that "... the Administration's plan would increase the total counts of warheads available before any attack from 8,800 today to about 14,000 in 1990 and 1996". Many would claim that these numbers represent a ridiculous level of "overkill." If we were to absorb a surprise Soviet counterforce first strikein an ungenerated force posture, how many of those warheads do we believe would survive for use in retaliation, now, in 1990, and in 1996?

ANSWER: The U.S. policy of deterrence is designed so that the USSR would perceive that no matter what theoretic scenario it examined, the USSR would see that U.S. forces are of such a size and posture as to be able to deny the USSR its war aims. While static measures, such as raw weapons numbers, can influence international perceptions of the U.S.-Soviet balance, what is crucial to deterrence is such dynamic measures as survivability, reliability, and penetrativity, which are scenario dependent. The U.S. must consider all of

these factors in its calculus of deterrence. In the dynamics of deterrence, the President has determined that national security objectives can be met with reduced arsenals for both nations, so long as the reductions are mutual and verifiable. This is the basis of his START proposal. In the absence of START, the U.S. policy of deterrence by a strategy of flexible response, unaltered since the 1960s, can be successful only if the U.S. forces evolve along with the threat they seek to deter.

Targeting Success

QUESTION: Employing the framework and figures of the previous question, how many of the surviving warheads would actually reach their targets in the Soviet Union and destroy them, under conservative assumptions, now, in 1990, and in 1996?

ANSWER: Our ability to deter Soviet aggression rests on our ability to retaliate credibly and appropriately to any attack against us. Mere warhead counts are insufficient in this regard because they tell us nothing about the quality of those warheads. For example, after a Soviet attack on our ICBMs, would we possess sufficient remaining warheads with sufficient accuracy and yield to retaliate against Soviet military facilities? Or would we be forced to choose a less appropriate response because our surviving systems were incapable of that kind of response? It is questions such as these -- and Soviet answers to them -- which affects our ability to deter. Our modernization program is designed to make certain that the Soviet leadership understands that, at whatever point in the future, we will have the capabilities necessary to continue to retailiate -- and therefore to deter -- in accordance with our policy of flexible response.

Concept of Mutual Assured Destruction

QUESTION: Do you believe the Soviet Union ever accepted the concept of mutually assured destruction as the basis for their strategic relationship with the U.S.?

ANSWER: It is clear that the Soviet leadership never accepted the concept of mutual assured destruction as the basis for their strategic relationship with the United States. To be fair, I must point out that flexible response -- and not mutual assured destruction -- has been the basis of U.S. nuclear policy since the early 1960s. Our policy seeks to deter both nuclear and conventional attack on us or our allies; it does so because we know that there would be no winners in a nuclear war. Unfortunately, the Soviet leadership, through its writings, force deployments, and actions has given us the clear perception that it believes a nuclear war may be fought and won under certain circumstances. Our modernization program -- including the modernization of our ICBM force -- is designed to convince them that those certain circumstances will never exist.

Soviet Strategic Doctrince

QUESTION: Would you characterize the substance of Soviet strategic doctrine as it presently exists as you understand it?

ANSWER: The Soviet leadership, through its writings, force deployments, and actions has given us the clear perception that it believes a nuclear war may be fought and won under certain circumstances. Our modernization program -- including the modernization of

our ICBM force -- is designed to convince them that those certain circumstances will never exist.

Soviet Reload and Refire Capability

QUESTION: How significant is the Soviet ICBM reload and refire capability.

ANSWER: The Soviet ICBM reload and refire capability is sufficiently significant that we must develop hard target capable systems in order to negate it in retaliation. We are seeking to address that in our START proposal.

Soviet Submarine Tunnels

QUESTION: How significant are the tunnels the Soviet Union has constructed to contain and shelter its SSBNs while they are in port?

ANSWER: The development of tunnel for Soviet submarine use is important from the standpoint of survivability and verifiability of these important assets. It appears self-evident that the use of such tunnels would complicate the tracking of Soviet submarines and contribute to their inherent survivability. We will continue to monitor such developments.

Reconstitution of Soviet Strategic Forces

QUESTION: After launching a nuclear first strike, do you believe the Soviet Union has the ability to use its reload ICBMs and protected SSBNs to reconstitute its strategic nuclear striking forces?

ANSWER: It is clear from Soviet doctrine, Soviet deployments and Soviet exercises, that they intend to do just that.

Soviet Reconstitution

QUESTION: How important are the MX and the Trident II to our ability to prevent the Soviet Union from reconstituting its strategic nuclear striking force?

ANSWER: Reconstitution of the Soviet strategic nuclear force involves reconstitution of their reload missiles in the silos and the leadership and communications net needed to sustain a military utility of that force. All aspects of the C^3 infrastructure and the forces themselves are extremely hardened. The MX and the Trident II are extremely important to denying any confidence to the Soviet leadership that its nuclear forces can be reconstituted and used for coersion.

U.S. Ability to Prevent Soviet Force Reconstitution

QUESTION: As a national strategic objective, how would you rank our ability to prevent the Soviet Union from reconstituting its strategic nuclear striking force after it has delivered a first strike against us?

ANSWER: As a national strategic objective it is of paramount importance that we deter the Soviet Union from ever attacking us or our allies in the first place. To do this, we must make clear to the Soviet leadership that it will not be able to fight and win a nuclear war. This task requires the ability to threaten credibly what that

leadership values most, and to have the clear ability to frustrate the plans, such as reconstituting its nuclear forces, on which Soviet planning for victory and coercion in the post-war depend.

Post-War Dominance

QUESTION: In a post-nuclear war world, what significance would Soviet possession of the only workable strategic nuclear strike force have to the rest of the world?

ANSWER: If the Soviet Union were to emerge from a nuclear conflict with its vital assets intact and with a nuclear monopoly by which they could dominate the world, I think the Soviet leadership would believe its requirements for victory had been achieved. Our policy, and the strategic modernization programs which give it credibility, is designed to ensure that the Soviet leadership recognizes along with us that there will be no victors in a nuclear exchange. Indeed, it seeks to make clear that should the Soviet leadership ever begin such a war, they will lose their vital assets, including their military forces, their ability to control the USSR, and their ability to sustain their political-military establishment. Convincing them of this fact is the surest way to deter them from committing aggression in the first place.

Improvements in Soviet Defenses

QUESTION: Do you believe Soviet efforts to reduce damage we could inflict upon them by the combination of improved offensive systems, improved active defenses, and improved passive defenses have been effective over the past five years?

ANSWER: During the mid- to late-1970s, the Soviet Union deployed more than 600 powerful SS-18 and SS-19 ICBMs with nearly 5,000 highly accurate warheads; at the same time they hardened their missile silos and key command and control facilities to resist attack. And, of course, they have maintained and expanded what was already the world's largest air defense system. The Soviet developments have simultaneously endangered the survivability of our ICBM force, reduced that ability of our bombers to penetrate, and substantially weakened the retaliatory effectiveness which lies at the heart of our strategy of deterrence. It is to correct these significant imbalances and to restore strategic stability that we must modernize our strategic forces.

Soviet Damage Limitation

QUESTION: Do you believe Soviet damage limitation efforts have seriously eroded our ability to deter war?

ANSWER: Soviet offensive and defensive -- both active and passive -- efforts at damage limitation have undercut the stability of the nuclear balance. If we do not act to restore the retaliatory strength of all three legs of the Triad -- including our ICBM force -- strategic stability will erode further and we will face the very real danger that the Soviets could at some point come to believe that they could use, or blackmail us by threatening to use, nuclear forces to gain their military or political ends.

Surprise Soviet Counterforce Strike

QUESTION: Please describe your view of the dynamics involved in

a U.S. response from an ungenerated force posture to a surprise Soviet counterforce strike, based upon present forces on each side.

ANSWER: The Soviets possess the capability today to execute a wide variety of attacks against the United States and our allies. It would be counterproductive to focus on just one of those. Our policy of deterrence is designed to ensure that the Soviet leadership, in contemplating all of its options, continues to decide that none of them will bring gains commensurate with the retaliation we could inflict. As you know, our strategic forces currently possess major deficiencies in terms of both survivability and retaliatory effectiveness. Our strategic modernization program -- including our proposed ICBM modernization program -- is designed to correct these deficiencies in a phased and coherent manner.

U.S. Response to Soviet Strategic Strike

QUESTION: Under the same conditions as those specified in question 41 above, please describe the dynamics of a U.S. response if the entire strategic modernization program is deployed.

ANSWER: As I noted in my response to the preceeding question, the Soviets possess the capability today to execute a wide variety of attacks against the U.S. and our allies. It would be counterproductive to focus on just one of those. Our policy of deterrence is designed to ensure that the Soviet leadership, in contemplating all of its options, continues to decide that none of them will bring gains commensurate with the retaliation we could inflict. As you know, our strategic forces currently possess major deficiencies in terms of both survivability and retaliatory effectiveness. Our strategic modernization program -- including our proposed ICBM modernization program -- is designed to correct these deficiencies in a phased and coherent manner.

Deterrence and Military Capability

QUESTION: Please explain how deterrence is related to actual military capability or "war fighting" capability.

ANSWER: Our deterrent posture is based on what deters the Soviet leadership from initiating aggression against us or our allies. To this end, it has been our belief that deterrence is best served by the possession of forces and plans for their use which make Soviet assessments of possible war outcomes, under any contingency, so uncertain and dangerous as to create strong disincentives for initiating attack or aggression. This requires that we be convincingly capable of responding in such a way that the Soviets would be denied their political and military objectives, and, hence, could not achieve their war aims. In other words, we must have a doctrine and plans for their use which make clear to the Soviet leaders that no course of aggression by them that led to the use of nuclear weapons could lead to victory—however they define it. It should be apparent that if our forces cannot be used effectively, if necessary, neither can they credibly deter. Deterrence cannot be based upon a hollow threat.

Second-Strike Capability

QUESTION: In your view, if the U.S. strategic forces retained a realistic second strike capability only against Soviet cities, would this be sufficient to deter them from undertaking international adven-

tures involving the threat of nuclear blackmail and the possibility of nuclear war with the U.S.?

ANSWER: My view is the same as that held by my predecessors over the past 20 years. Allow me to quote from the 1982 DoD Annual Report:

> "The United States has never--at least since nuclear weapons were available in significant numbers --had a strategic doctrine based simply and solely on reflexive, massive attack on Soviet cities and populations. Previous administrations, going back almost 20 years, recognized the inadequacy as a deterrent of a targeting doctrine that would give us too narrow a range of options. Although for programming pruposes, strategic forces were sometimes measured in terms of ability to strike a set of industrial targets, we have always planned both more selectively [for options limiting urban-industrial damage] and more comprehensively [for a wide range of civilian and military targets]. The unquestioned Soviet attainment of strategic parity has put the final nail in the coffin of what we long knew was dead--the notion that we could adequately deter the Soviets solely by threatening massive retaliation against their cities."

U.S. First Strike

QUESTION: If both MX and Trident II were fully deployed, would the total number of hard target capable warheads on the entire force give the U.S. the capability to execute a disarming first strike against the Soviet Union?

ANSWER: Absolutely not. We are under no illusion that we could ever execute a disarming first strike against the Soviets. Furthermore, we do not seek, nor will we develop, such a capability because our strategy has been, is, and will remain, a retaliatory one.

Soviet SSBNs As A Deterrent

QUESTION: Would Soviet SSBNs at sea be adequate to deter us from considering a nuclear first strike?

ANSWER: The USSR does not need to deter the United States: we plan no aggression against it or any other state. Our policy is manifestly a defensive one, and our force structure provides clear evidence of this. As the report of the Scowcroft Commission so ably put it:

> "Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what would deter ourselves. Deterrence is the set of beliefs in the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to determine, as best we can, what would deter them from considering aggression, even in a crisis -- not to determine what would deter us."

Number of Soviet Hard Targets

QUESTION: Over the past five years, has the number of hard targets in the Soviet Union we must be able to credibly threaten increased or decreased?

ANSWER: The Soviet target base has been dispersed and hardened to a high degree over the past two decades. Over the past five years, the pace and scope of this activity has increased signficantly and it is continuing.

U.S. Hard Target Destruction Capability

QUESTION: Has our time-urgent hard target destruction capability increased at the same or greater rate than the rate at which the number of hard targets we must be able to attack has grown?

ANSWER: Our capability to threaten credibly hardened Soviet targets with prompt retaliation has lagged significantly behind the rate at, and the degree to which the Soviets have been hardening. Our modernization program -- including our ICBM modernization plan -- is essential to our ability to restore credibility to this aspect of our deterrent.

Soviet Hardening

QUESTION: In general, what functions has the Soviet Union chosen to protect through the construction of very hard blast shelters or silos?

ANSWER: The Soviets have embarked on a massive hardening campaign to protect a wide variety of military, leadership, and key industrial facilities. Particular emphasis has been placed, however, on protecting key command and control facilities, ICBM launch complexes, and ICBM silos.

U.S. Ability to Deter

QUESTION: What factors do you examine when evaluating the trend in our ability to deter a Soviet nuclear attack?

ANSWER: Our ability to deter a Soviet nuclear attack rests on the credibility which Soviet leadership attaches to our polity of retaliation and to our will and capability to enforce that policy if deterrence fails. Credible deterrence requires us to have the ability to respond to a wide variety of potential Soviet attacks, and, in each case, to present the Soviet leadership with the clear fact that no attack on their part will produce gains which are worth the cost we will impose in retaliation. As the Scowcroft Commission noted:

> "Deterrence is not an abstract notion amenable to simple quantification. Still less is it a mirror image of what would deter ourselves. Deterrence is the set of beliefs if the minds of the Soviet leaders, given their own values and attitudes, about our capabilities and our will. It requires us to determine, as best we can, what would deter them from considering aggression, even in a crisis -- not to determine what would deter us."

U.S. Ability to Deter Attack

QUESTION: Has our ability to deter a Soviet attack increased or decreased over the past five years?

ANSWER: The massive Soviet offensive and defensive programs over the past five years have undercut the stability of the nuclear balance, and have undercut the retaliatory effectiveness which lies at the heart of our policy of deterrence. If these trends are uncorrec-

ted, we will face the very real danger that the Soviets could at some point come to believe that they could use, or blackmail us by threatening to use, nuclear forces to gain their military or political ends. Our strategic modernization program -- including the modernization of the land-based leg of our Triad -- is designed to reverse these adverse trends, restore the strategic balance and strengthen deterrence.

Deployment of the Peacekeeper Missile

QUESTION: How important is deployment of the MX to our ability to have confidence in our ability to deter war?

ANSWER: The prompt hard target capability of the Peacekeeper will end the Soviet monopoly in hard target capability and will be a major step in our effort to bolster strategic stability. It enhances our effort to hold the full Soviet target base at risk. In combination with other elements of our strategic modernization program, including the development of a small single warhead ICBM, the Peacekeeper will add measurably and significantly to our ability to deter war.

Soviet Hardening

QUESTION: Do you believe that Soviet actions to harden and defend a target are the best indicators of the Soviet's view of the value of that target to them?

ANSWER: The Soviet leadership has demonstrated clearly over the past two decades, in its writings and in its practice, that it places great value on its military power, its ability to control the Soviet Union, and on its ability to sustain war. The hardening, dispersal and defense of these assets is one of the important indicators that the Soviets mean what they say about their importance.

Deterrence and Soviet Hardening

QUESTION: In your view, does our ability to deter nuclear war erode as the Soviets continue to harden and defend facilities which perform vital functions for them?

ANSWER: It is essential that we possess the capability to hold at risk what the Soviet leadership places highest emphasis on preserving. The Soviet hardening effort is an attempt to deny us that capability. This, if unaddressed, risks underutting deterrence beause the Soviets could come to believe that they could emerge from a major conflict with their forces, control, and war supporting capabilities, intact. Thus we must be able to hold these targets at risk. As a result, it is crucial that we proceed to modernize our Triad, including our ICBM force, because we currently lack an ability to threaten credibly prompt retaliation against hardened Soviet targets. Deployment of Peacekeeper as part of the President's proposed ICBM modernization program is therefore vital.

U.S. Ability to Deter Conflict

QUESTION: Can we remain confident of our ability to deter war if our ability to modernize our strategic forces is terminated by a nuclear freeze agreement, while Soviet construction of active and passive defenses continues unconstrained?

ANSWER: A nuclear freeze, while well intended, is not good deterrence policy, good defense policy, or good arms control policy. One

reason for this is precisely the point you have raised. A freeze would not only prevent us from modernizing our retaliatory capabilities but it would also leave unconstrained major Soviet active and passive defense measures aimed at blunting our retaliation. The obvious danger is that if the Soviets ever come to believe they could in fact blunt our retaliation, then our ability to deter war will have been undercut.

Questions Submitted by Senator D'Amato

(Response by General Vessey)

DETERRENCE

QUESTION: In order to deter the Soviet Union from a nuclear attack on the United States, must our deterrent be militarily effective in their terms of reference to be credible?

ANSWER: Yes. Since deterrence is a state of mind, he who wishes to deter must affect the attitudes of the adversary who is being deterred. Deterrence means dissuading one's potential enemies from starting a war by making it self-evidently clear that war aims cannot be attained--that the cost will be too great. In order to convince the Soviet leaders that their risk of loss is greater than the potential gain, they must be convinced of our military capability and our will to use that capability. Every facet of the President's strategic modernization program contributes to the strength of deterrence. Modernized strategic forces make it clear to the Soviet leaders that we can and will retaliate to a Soviet nuclear attack by attacking and destroying their forces in a way that guarantees their war aims, as they view it, cannot be achieved.

Characteristics of Nuclear Deterrent

Senator D'Amato: What, in your opinion, are the main characteristics of the U.S. strategic nuclear deterrent which it must continue to possess in order to be credible in Soviet eyes?

General Vessey: The main characteristics required for credibility of the US strategic nuclear deterrent force in the eyes of the Soviets are those that render ineffective the ongoing Soviet efforts towards a warfighting capability and leadership survivability. That is, our weapons systems must have the capacity to negate the Soviet potential for nuclear war victory, which the Soviets are seeking through highly effective counterforce attack capabilities, extensive hardening programs, and massive dispersal and relocation plans for their military forces and leaders. In simple terms this means that the US must have highly survivable forces that can put at risk Soviet assets housed in hardened facilities and at the same time have targeting flexibility to cope with movable targets. These characteristics are fundamentally different from those of our strategic arsenal in the past, as are the associated command and control systems for managing them. The basis for the change, however, is not a conceptual change in the US doctrine of deterrence, which remains the cornerstone of our strategy. What is happening is that two

decades of enormous Soviet efforts to obtain a nuclear warfighting capability are now starting to mature in consequential ways that are creating different tactical requirements for the US strategic forces to preserve a stable deterrent capability.

Soviet Acceptance of MAD Concept

QUESTION: Do you believe the Soviet Union ever accepted mutually assured destruction as the basis for its strategic relationship with the United States?

ANSWER: There is overwhelming evidence that the Soviets have rejected, and continue to reject, mutually assured destruction as the basis for their strategic relationship with the US. The evidence consists of what the Soviets say and what they do.

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Some salient points of evidence that the Soviets have consistently rejected mutual assured destruction and have followed their own war-fighting, damage-limiting strategy are:

- Preemption consistently has been the preferred Soviet strategic option;
- Second strike has been the residual option if the Soviets do not succeed in preempting;
- Launch on warning was adopted as the second option (after preempting) in the mid-1960s.

The Soviets do not target the general population and select only those economic targets they consider essential to the US/NATO ability to support a war. They have sized their strategic missile warhead inventory to their worldwide targeting requirements, plus a substantial reserve to support military operations after the initial exchange and to dominate the post-war world. They plan to use their inventory to ensure high confidence in achieving the required degree of damage to selected targets by striking the same target two or three times.

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The original MIRV designs of the SS-17, SS-18 and SS-19 correspond to the requirements for effective counterforce attacks on MINUTEMAN silos which the Soviets perceived to be hardened to [deleted] psi in the mid-1960s. The timing and characteristics of the SS-18 Mod-4 and the SS-19 Mod-3 payload development programs correspond to the requirements for effective counterforce attacks on MINUTEMAN silos as upgraded in the early 1970s.

Seventy to 80 percent of the total Soviet ICBM inventory currently consists of systems designed for counterforce attacks on MINUTEMAN silos and other hard targets.

The Soviets continued to modernize and expand their air defenses through the 1960s and 1970s, even though these defenses were rendered largely ineffective by US low-altitude penetration tactics and short-range attack missiles. The Soviets are continuing a rigorous modernization program of their air defense system -- as exemplified by deployment of FOXHOUND, AWACS, and SA-10. These systems are designed to combat the retaliatory capability of the aerodynamic component of the US TRIAD.

During the decade of the 1960s, and again in the 1970s, the Soviets procured more than 100 major weapon systems. In each decade, about 20 of these systems were procured for strategic offensive forces. About 20 major systems were procured for strategic defensive programs (per Soviet definitions of these

missions) in the 1960s, and about 30 in the 1970s. In the 1980s, the Soviets will probably have closer to 150 major weapon systems in procurement with the emphasis on strategic defensive systems, because this is the area where potential payoff for the Soviet's warfighting, damage-limiting strategy is greatest.

Further evidence that the Soviets have never seriously considered accepting MAD can be seen in their extensive and automatically implemented damage-limiting strategy. The components of this strategy include: the execution of a countermilitary offensive aimed at destroying the adversary's ability to wage war, and the use of defensive measures, both active and passive, which enhance the prospects for survival as well as contribute to the attainment of victory. As a corollary to this, the Soviets have adopted consistent positions in arms limitation negotiations supporting their warfighting and warsurvivable strategy. In this regard, the Soviets have sought to maintain a decisive strategic counterforce capability, while constraining that of the adversary, thus limiting potential damage to the homeland.

Soviet active defense forces play a key role in the damage-limiting strategy. The primary purpose of these forces is to sharply reduce the enemy's capability for inflicting damage upon Soviet -- and Warsaw Pact -- military forces. This active defense effort complements the counterforce employment concept for Soviet offensive forces. Active defense forces include air defense systems, antisatellite capabilities, and antiballistic missile (ABM) systems.

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The highly structured, militarized civil defense organization is established at all levels of the government and the economy. The chief of civil defense is both an army general and a deputy minister of defense. Full-time civil defense staffs exist at national, republic, oblast, city, and rayon levels and at significant economic enterprises and installations. These elements will support the mobilized civil apparatus (dispersed and protected in its wartime facilities) in the conduct of their war management operations -- the maintenance of political control over armed forces, state apparatus, and general population; the continued management of essential wartime production and services; and the repair and restoration of transportation, communications, and industry damaged in war.

The Soviet civil defense program is more than simply a means to protect leadership, key installations, essential work forces, and significant portions of the general population from the effects of nuclear war. It is aimed at insuring the survival of the USSR as an effective nation state, with government and essential instruments of state power intact. Its militarized nature is congruent with its positive role in supporting the Soviet warfighting strategy. Such a system's viability is greatly enhanced when combined with the ability to conduct a disarming first strike.

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As was pointed out in the recent DOD publication, Soviet Military Power, the Soviets have an extensive program to provide hardened command posts and communications for the Soviet's political, military and economic leadership. The purpose of this program is to ensure continuity of control by the party and continuity of functioning of the Soviet system during and after a nuclear exchange. Other aspects of the Soviet war management system will provide for the evacuated urban population and will

carry out repair, rehabilitation and reconstitution of essential economic facilities and services.

Soviet national priorities have shifted steadily to the military since the late 1950s. Excluding the vast shelter and war management effort, pensions and some other outlays, military expenditures reached 12-13 percent of Soviet GNP in 1970, 15-16 percent in 1980, and will probably rise to 18-19 percent of Soviet GNP by 1985 if the Soviets stay their present course. Military programs that not only are not required by, but are also counter to the objectives of mutual assured destruction, probably account for at least one-third of Soviet military outlays. The military burden on the Soviet economy would be much reduced, and probably stabilized, if the Soviets were willing to buy only the military capabilities required for a mutual assured destruction posture relative to the US.

In sum, the Soviets have done and are doing their best to nullify US deterrent forces, to take the "mutual" out of assured destruction, and to acquire the overall force posture required to fight and win a nuclear war. They are still short of their objectives in many areas, but it is not for lack of effort. Moreover, by standard Western arms control theory, everything the Soviets are doing to deny mutual assured destruction is "destabilizing."

Principles of Soviet Strategic Nuclear Doctrine

Senator D'Amato: Based on published sources, can you summarize what you believe to be the main principles of Soviet strategic nuclear doctrine?

General Vessey: Both Soviet military doctrine and military strategy for the nuclear age were formulated in the period between 1953 when Stalin died (March) and nuclear weapons entered the inventory (late 1953 or early 1954), and the XXII Party Congress in October 1961. Since 1961 the Soviets have published a number of monographs and many articles on their doctrine and strategy. According to Soviet sources, military doctrine is formulated by the Party, presumably in consultation with the military. Essentially, military doctrine defines the nature of a future war, the probable adversaries, Soviet objectives in such a war, the general characteristics of the forces required, and preparedness policies. Military strategy is formulated by the military establishment on the basis of the Party's military doctrine and is approved by the top political leadership. Essentially, military strategy specifies how the objectives of doctrine are to be achieved, what forces and weapons are required, the interrelationships between military requirements and economic and technological capabilities, military services and missions, principles of civil defense, resource and logistics requirements, leadership and command of military forces, and an assessment of the stratetic views of the probably enemy.

Soviet military doctrine and strategy overlap in the area of the Party's "military-technical policy" which specifies the weapons systems to be developed and procured and other essential characteristics of the Soviet armed forces. Consequently, it is convenient to consider the principal tenents of Soviet military doctrine and strategy together.

- A war between the USSR/Pact and the U.S./NATO would be the third and decisive conflict between Soviet "socialism" and Western "imperialism" to determine which social system will inherit Earth. Such a war

will be an intercontinental, coalition war involving all the "basic" states.

- Such a war would be "just" war for the USSR but "unjust" for the West. Like previous wars, a nuclear war would be the continuation of politics by violent means. The use of nuclear weapons by the USSR would be "just," but because a world nuclear war would be so destructive the USSR could not logically rationalize initiating one. The Soviets, therefore, reject any unprovoked surprise attack ("out-of-the-blue") on the "imperialists". Revolutionary movements and "just" wars of national liberation," however, deserve and will receive Soviet support.
- The growing power of the USSR and its allies make it possible to deter a U.S./NATO surprise attack; hence, war is not "fatally inevitable." Nevertheless, this deterrence may fail, in which case the USSR and its allies must and will "win" the war by completely defeating enemy militry forces and occupying enemy countries in the continental theaters of military operations (TVDs). To the Soviets, victory also entails the neutralization of the United States, the recovery of the USSR, and the triumph of world socialism.
- To win the war, Soviet forces must limit damage to the USSR with counterforce strikes by strategic offensive forces and operations by strategic defensive forces -- air, missile, space, ASW and civil defense -- against surviving enemy forces. Strategic defensive operations are designed to ensure the viability of the assets required to prosecute the war after initial exchange: the politico-administrative system, essential economic units, military forces and facilities, and the general population.
- The war may begin under a variety of circumstances, including surprise attack (on the USSR) with either nuclear or convential weapons. Most likely, the war will be relatively brief -- a few weeks -- but it could turn into a protracted conflict.
- Soviet forces must be ready and able to preempt a U.S. NATO attack, at any level of conflict. Preemption on the basis of strategic warning is the preferred option. In the absence of strategic warning, Soviet forces must be able to launch-on-tactical-warning, launch under attack, or to deliver a retaliatory strike. In <u>all</u> of these circumstances the objective of the Soviet strike is to seize (or regain) and hold the initiative and to limit damage to the USSR.
- Soviet strategic nuclear strikes -- principally by the SRF -- will be decisive but cannot defeat the enemy completely, or occupy Europe. Hence, the initial strategic exchange will be followed by a combined arms offensive -- Ground Forces, Frontal Aviation and Navy supported by the SRF, LRA and Navy SLBMs -- against enemy forces in the Eurasian TVDs and at sea.

- o The priority targets of all Soviet nuclear forces -- strategic and operational-tactical -- are the enemy's nuclear delivery systems, and weapons, nuclear command, control and communications, and air defenses. Soviet strategic forces target enemy politico-administrative centers, military forces and facilities in the rear areas, essential (selected) industries and transport-communications facilities. Operational-tactical (missiles and aircraft) target enemy military forces and facilities in the forward areas. Yields are matched to targets in order to ensure the required damage to the target proper. The Soviets do not target the general population but may target selected elite groups.
- o The armed forces and the economy must be prepared for nuclear war in peacetime. The first objective is to achieve "quantitative and qualitative superiority" in military forces. This is the purpose of the Party's "military-technical policy" as stated by the Defense Council/Politburo in Party Resolutions and joint Party-Government Decrees. Preparation of the economy in peacetime includes creation of State and strategic reserves of personnel and materiel reserves, and measures designed to carry out repair, rehabilitation and recovery of the economy in the event of war.

Because of the range and destructiveness of contemporary nuclear delivery systems, only an offensive military strategy can win a nuclear war. Defensive strategies are unacceptable. Defensive operations, however, are essential to limit damage from enemy nuclear forces that cannot be destroyed or neutralized by strategic offensive forces.

Although the basics of Soviet military doctrine and strategy have changed little since they were formulated in 1953-1960 and then published in the early 1960s, some modifications have occurred. In those years, the Soviets expected a nuclear war between the two superpower coalitions to be nuclear from the outset. However, in response to changes in NATO doctrine published in 1967, the Soviets modified their doctrine to allow for a conventional phase in a superpower coalition war. Second, in 1966-67, Soviet military strategy was modified to add launch-on-tactical warning (an enemy attack on its way) to the prior basic scenarios of preemption (the preferred scenario) and second strike.

Another modification of Soviet military strategy may have occurred in the late 1970s or may still be in process. The Soviets now may perceive the possibility of "decoupling" a nuclear war with NATO from an intercontinental exchange as a result of changes in U.S. declaratory policy and the perception by the Soviets of a shift in the nuclear balance in favor of the USSR.

There are also indications of increased emphasis on conventional operations. Otherwise, there are no indications of impending fundamental changes in Soviet military doctrine and strategy for the 1980s.

The foregoing is based on unclassified Soviet sources published from 1953 through 1973 and on the General Staff journal, Military Thought. which has been declassified through 1973. During this period these sources were explicit and accurate.

Beginning in 1972-73 discussion of most of the principal tenets

of Soviet military doctrine and strategy ceased to appear in unclassified Soviet literature. Positive disinformation, however, was limited until 1977 when Brezhnev publicly denied that superiority had been, or currently is, the Soviet objective and Marshal Ogarkov became Chief of the General Staff. Ogarkov also succeeded Marshal Grechko (died in 1976) as chairman of the Editorial Commission of the Soviet Military Encyclopedia beginning with Volume 3, published in 1977. Selected disinformation on Soviet objectives and nuclear weapon use has appeared in the Encyclopedia after Volume 2.

By far the most important Soviet sources of disinformation on Soviet military doctrine, strategy, policy and objectives, however, since the mid-1970s, has been Mr. Georgy Arbatov and his staff at the USA Institute. Arbatov and his staff actually combine truth, half-truth and fiction which is the highest form of disinformation. Moreover, through extensive contacts, travel and speaking engagements in Western political and intellectual circles, Arbatov and company have learned to express their disinformation in the deceptive language to which Western policymakers and intellectuals are most susceptible.

[Deleted].

Coordination of Soviet Arms Control Position

Senator D'Amato: Do you believe the Soviet arms control negotiating positions are well coordinated with their military planning and other foreign policy initiatives?

General Vessey: Soviet arms control policies are unquestionably well coordinated within the Soviet military and are completely supportive of foreign policy objectives. Soviet strategy in arms control is designed to protect military capabilities and programs and is shaped by the same doctrinal concepts that determine Soviet military strategy. The Soviet Defense Council is responsible for the development of overall Soviet foreign policy as well as military [deleted] [deleted]. Such a system insures that policy formulation is a well coordinated effort.

Soviet Military and Arms Control

Senator D'Amato: What degree of influence do you believe the Soviet military has over Soviet arms control policies and negotiating positions?

General Vessey: As stated in the response to the previous question, the Soviet Defense Council determines [deleted] [deleted]. The Soviet military is represented on this body by the Minister of Defense and the Chief of the General Staff. The remainder of this answer is classified Top Secret codeword and is on file at DIA, DI-3, Rm 3E243, The Pentagon, 697-5101. It cannot be meaningfully answered at the Secret or Unclassified level.

Comparison in influence Soviet and US Military have in Arms Control

Senator D'Amato: Do you believe the Soviet Military has more say in the arms control process on their side than the US military has say in the arms control process on our side.

General Vessey: Within Party guidelines the Soviet military plays a preponderant role in determining Soviet arms control policies and negotiating positions. In fact, there are few top-level officials in the Soviet leadership, outside the military at the General Staff, who are privy to the type of information needed to formulate such policies.

QUESTION: Is it important to maintain a modern militarily effective ICBM force if we have a very large lead over the Soviet Union in the technical capabilities and quality of our bomber and ballistic missile submarine force?

ANSWER: The US has always relied upon a balanced TRIAD of strategic nuclear forces, and it has served us well. The diversity of our TRIAD drives the Soviets to make choices that significantly reduce their effectiveness against any one component in order to attack another. For example, should Soviet planners decide to attack our bomber and submarine bases and ICBM silos with simultaneous detonations, a high proportion of our bombers would be alerted by the Soviet ICBM attack and could safely take off before coming under attack. If, on the other hand, the Soviets chose a simultaneous launch of their ICBM and SLBM weapons, then a very high proportion of our ICBM systems could be launched in retaliation (after confirmed SLBM nuclear detonations on our homeland and before Soviet ICBMs could reach our silos). As a result, Soviet planners face timing and coordination problems which are extremely difficult, if not impossible, to resolve. With three separate forces, there is little chance they could successfully destroy all three at once, no matter how well planned and executed the attack. Thus, the diversity of a TRIAD creates an overwhelming uncertainty of success that supports deterrence. In addition to the interactive and complementary capabilities of the TRIAD and the fact that the three legged nuclear retaliatory capability gives us resiliency and a reasonable degree of flexibility, the TRIAD provides an important hedge against a technological surprise by the Soviets in either their offensive or defensive capabilities. While there are some significant areas of US technological and qualitative advantage, many of our systems are old relative to those of the Soviets and we are seriously lacking in our capability against hardened targets. Recent improvements in Soviet ICBM capability and hardness threaten the effectiveness of our ICBM force. The situation had deteriorated to the point that the Soviets now have nearly a four-to-one advantage in prompt, countermilitary capability. These factors necessitate the modernization program upon which we have embarked.

The sea-based missile and the bomber force have forward-looking modernization programs. The land-based missile portion of the TRIAD is presently reliable, but it is badly in need of modernization. The PEACEKEEPER missile is the answer. This missile substantially increases our military capability, contributes positively to political perceptions by our allies, and, most importantly, sends a strong signal of US resolve to the Soviets.

The deployment of a modern ICBM will help redress the imbalances that have developed over the past decade. In the future, adding the small single warhead ICBM coupled with aggressive effective and verifiable arms reductions offer the

prospect of increased stability. In addition, the President's long-term goals of effective defense against ballistic missiles provides a blueprint for deterrence well into the next century.

MILITARY REASONS

QUESTION: What are the military reasons which compel us to maintain a modern, militarily effective ICBM force?

ANSWER: The military reasons to maintain a modern, militarily effective ICBM force are based on our national policy of deterring Soviet agression with a balanced TRIAD of strategic forces: land-based ICBMs, sea-launched ballistic missiles and air breathing bombers. A balanced mix of these forces provides optimum effectiveness against the full range of Soviet warfighting assets and a hedge in case of catastrophic failure or technological breakthrough against any one element. It also forces the Soviets to dilute their defensive resources across a diversified threat instead of concentrating their efforts against a homogenous force.

Unfortunately, our TRIAD today is not well-balanced. Recent advances in Soviet ICBM technology have detracted from the effectiveness of our ICBM force. While SLBM and bombers can carry a disproportionate share of the deterrent mission for a short period of time, a modernized ICBM is needed as soon as possible to restore our ability to hold important Soviet strategic assets at risk in the early phases of a conflict. This prompt counter-military capability is very important to achieve our national objectives and deny the Soviets an early advantage in escalation control, limit damage to the US homeland, and terminate conflict on terms favorable to the US. Without major force improvements such as those offered by PEACEKEEPER, the Soviets will be in a position where coercion of US allies or adventurism in the third world may be an attractive and viable option.

The ICBM modernization program recommended by the Scowcroft Commission also provides the necessary foundation for US arms control negotiations. We cannot maintain an effective deterrent force at the proposed reduced levels without deploying such a modernized system. Furthermore, since the new Soviet ICBM systems are relatively invulnerable to our existing ICBMs, they have no incentive to negotiate unless we proceed with our modernization program.

UNIQUE CHARACTERISTICS

QUESTION: What are the characteristics which are unique to the ICBM leg of the triad and why are they important?

ANSWER: Intercontinental ballistic missiles possess a variety of attributes which fully complement the other two legs of our strategic TRIAD. First, basing in the continental United States raises the threshold to nuclear conflict by making a potential aggressor seriously consider the grave consequences of overtly attacking American soil. Second, due to their combined responsiveness, accuracy and payload, ICBMs have an unequalled capability to place time-urgent, hard targets at risk. This capability complicates enemy attack planning, and thus reduces their confidence of a successful attack. In addition, their redundant command and control links provide ICBMs excellent flexibility for use against isolated or widely spaced targets to

respond to an enemy attack in progress, defeat its objectives and terminate hostilities short of a massive nuclear exchange. ICBMs also have very high day-to-day alert rates, and do not require force generation which could raise tensions in a crisis. Finally, the ICBM force provides over half the day-to-day deterrent force while having the lowest operating and support costs of any TRIAD element.

Perhaps the most important characteristic, however, is the issue of Soviet perception. Perceptions are an inherent part of deterrence and the Soviets perceive ICBMs as the dominant strategic system. Over 70 percent of their strategic capability resides in their ICBM force. To the extent they perceive our ICBM force to be ineffective, deterrence is weakened and, conversely, if they perceive our ICBMs capable of holding their high value strategic assets at risk, they will avoid conflict and thus be deterred.

QUESTION: In a trans-attack period, please compare the reliability of communications we can expect from the National Command Authorities to each of our bomber forces, our submarine ballistic missile forces, and our ICBM forces, and comment on the significance of the differences.

ANSWER: Estimates of the reliability of communications from the National Command Authorities to each of our nuclear force elements in a trans-attack period vary according to assumed scenario conditions. These conditions include type and intensity of the attack, readiness condition of forces and C3 systems, disposition of forces, status and location of decisionmakers. Tests of systems reliability are conducted both under peacetime conditions with all systems operating and under partially degraded conditions. In these tests, under normal conditions, reliability is excellent, that is message reception success rates are in the high (d) percents to all forces. Under partially degraded conditions, ICBM force success rates are generally above (d) percent, SSBNs about (d) percent, and, from limited samples, bomber success rates have been about (d) percent. However, under more severely degraded conditions, which have [deleted].

Senator D'Amato: How important to the credibility of our strategic deterrent is our ability to maintain secure, reliable communications with our nuclear forces during the period of an attack?

Answer: There is a direct relationship between deterrence and secure, reliable communications with our nuclear forces. Deterrence is based upon an adversary's perception of the risk or likely consequences of initiating an attack on the US. In the case of a nuclear attack, the military risk or consequences would be a retaliatory strike from the US strategic nuclear triad. Execution of that retaliatory strike is dependent upon secure, reliable communications. If an adversary perceived that the US lacked a reliable means of executing its nuclear forces prior to or during attack, the perceived risk of an attack against the US would be reduced. Therefore, secure, reliable communications with our nuclear forces must be viewed as a vital, integral part of the US nuclear forces and their deterrent value.

Senator D'Amato: Do you believe the Soviet threat to our strategic C-cubed-I will increase during the balance of the century?

General Vessey: The Soviets have under development several strategic weapon systems which will, when deployed during the next decade, greatly enhance their capability to attack US C^3I and other time urgent targets. Additionally, these systems, both mobile ICBMs and SLBMs will assure the survivability of a greater percentage of their strategic force which can be used during all phases of a general nuclear war of undetermined duration, thus denying the United States the prompt and assured reconstitution of its C^3I assets.

IMPORTANCE OF SURVIVABLE LAND-BASED ICBM FORCE

QUESTION: How important is a survivable land-based ICBM force in responding to the threat of a nuclear weapon designed to generate maximum electromagnetic pulse to attack and disable our Strat C3I capability?

ANSWER: Our ICBM force has been designed to be survivable against electromagnetic pulse (EMP) effects. Therefore, an attack on our C3I structure using EMP as a damage mechanism would not directly impair our capability to launch ICBMs against Soviet targets. Although our ICBMs are designed to withstand this EMP threat, we do recognize the possibility of periodic blackout of communications due to a dedicated EMP attack and have taken steps to minimize this threat. These steps are primarily in the form of EMP protection of existing systems and additional redundant systems designed for enhanced performance in the nuclear environment.

QUESTION: Do you believe Soviet development of a capability to reload their SS-17 and SS-18 silos after launching a first salvo is militarily significant?

ANSWER: The Soviets have contingency plans for reloading and refiring ICBMs from launchers that already have been used to fire an initial round. The cold-launch technique employed by the SS-17 and SS-18 lends itself to such a reload capability. Additionally, all currently deployed liquid-propellant ICBMs -- SS-11, SS-17, SS-18 and SS-19 -- are contained in a launch canister within the silo. This and the silo design minimize damage to the launcher during the initial firing and give the Soviets the capability to reload each of these launchers. The Soviets probably cannot refurbish and reload silo launchers in a period less than a few days; nevertheless, they believe that this capability is of significant value because they anticipate that a nuclear war might be protracted. The Soviets have made provisions for the delivery of reserve missiles, warheads and propellants to ICBM complexes for reload purposes. None of these extra missiles or warheads are counted under SALT agreements. Only the launchers are counted.

PREVENTING SILO RELOADS

QUESTION: Strategically, how important is it to us to be able to prevent the Soviet Union from successfully reloading its ICBM silos?

ANSWER: Our understanding of Soviet doctrine for conduct of strategic nuclear war indicates that they plan to strike each target with sufficient warheads to achieve a high probability of severe

damage. Against hard targets, this tactic requires planning multiple warheads on each objective target. In addition, one of their war aims is to dominate the post-war world. A large nuclear force in being is essential for the first task, and an adequate force of reserve weapons is required for the second task. Operational Soviet ICBM silos were constructed for a reload capability, which is routinely exercised as part of the Soviet ICBM test launch activities. By preventing the reload of their ICBM silos through destruction of the facility (whether loaded or empty at the time of destruction), both their operational strike and reserve force capabilities will be diminished. This will have an adverse impact upon the achievement of Soviet war aims which in effect may deter them from entertaining aggressive action.

QUESTION: What sort of advantage would accrue to the Soviet Union if it were able to reload its ICBM silos?

ANSWER: Following a strategic homeland-to-homeland nuclear exchange between the US and the USSR that targeted military and industrial complexes, the Soviets could strive to deter attack by any surviving and militarily capable nation. More importantly, they could attempt to project their power against other nations by use of their remaining arsenal. Reloaded ICBM silos would greatly enhance the Soviets post-exchange coercive ability.

Protection of Soviet Nuclear Submarines

Senator D'Amato: What sort of advantage accrues to the Soviet Union as the result of the tunnels they have constructed to protect their nuclear submarines?
General Vessey: [Deleted].

Reconstituting Strike Force

QUESTION: Do you believe the Soviet Union now has or will soon have the ability to substantially reconstitute their strategic offensive striking force after fighting a general nuclear war?
ANSWER: Research accomplished to date supports the judgment that the Soviets have an in-being wartime reconstitution capability for their strategic offensive missile force. [Deleted].

Location of Reload Missiles

Senator D'Amato: Have we located the storage places of the Soviet reload missiles so we can target them?
General Vessey: [Deleted].

Soviet Covert Launch Capability

Senator D'Amato: Have the Soviets developed a covert soft launch capability which will allow them to launch ICBM's from

surveyed sites, or IRBM bases, or test launchers not counted in SALT?

General Vessey: [Deleted].

Soviet Covert Launch Capability

Senator D'Amato: If they have such a covert soft launch capability, is it military significant?

General Vessey: [Deleted].

Soviet Strategic Nuclear Warheads

Senator D'Amato: How many total deliverable strategic nuclear warheads do you believe the Soviet Union has now?

General Vessey: Our current estimate of Soviet deliverable strategic nuclear warheads (carried on ICBMs SLBMs, and Bombers) is as follows:

ICBM: [deleted]
SLBM: [deleted]
Bomber-delivered
(includes Backfire) [deleted]
Total Warheads: [deleted]

The above figures do not include refire missiles. [Deleted].

Warheads Accountable for SALT Purposes

Senator D'Amato: How does your answer to the above question compare to the total number of deliverable strategic nuclear warheads you believe they have now which are accountable for SALT purposes?

General Vessey: Neither the SALT I Interim Agreement nor SALT II limited warheads. However, certain "counting rules" in SALT II modify the warhead totals given in question #23.

[Deleted].

Total number of warheads accountable for SALT purposes:

ICBM:	[deleted]
SLBM:	[deleted]
Bomber-delivered:	[deleted]
TOTAL	[deleted]

Difference in Warhead Totals

Senator D'Amato: Is the difference between the totals in questions 23 and 23 militarily significant?

General Vessey: [Deleted].

SOVIET RELIABILITY AS NEGOTIATING PARTNER

QUESTION: In your view, what does the Soviet development of an ICBM reload capability using missiles not counted for SALT purposes, development of tunnels to shelter SSBN's, development of covert soft launch capabilities, possible deployment of SS-16's in an operational mode, and testing of PL-4 and PL-5 tell you about Soviet reliabiity as an arms control negotiating partner?

ANSWER: In general, the SALT record indicates that the Soviets have abided by quantitative limits and agreed provisions which are specific and detailed. They obviously feel however, no obligation to comply with unilateral statements or interpretations or with the "spirit" of an agreement. [Deleted].

Regarding the overall issue of Soviet reliability as an arms control partner, the Soviets have viewed the process as a means of moderating the strategic threat from the United States, as well as a complement to other initiatives designed to weaken Western political resolve and NATO's overall military efforts. They view arms control as a means of impeding U.S. force modernization efforts and reducing the possibiility of U.S. technological breakthroughs, while at the same time they strive to advance their own force modernization programs. The Soviets feel that the arms control process has served them well, and they will likely abide by the specific provisions of existing and future strategic arms agreements so long as it is of benefit and serves their purposes. [Deleted].

QUESTION: Do you believe the Soviets have employed deceptive negotiating practices in their strategic arms negotiations with us?

ANSWER: It is not clear what is meant by "deceptive negotiating practices." It goes without saying that neither side in a negotiation reveals to the other the details of its negotiating strategy. The Administration is committed to achieving arms control agreements on their own merits, regardless of Soviet negotiating strategy.

IMPORTANCE OF MX

QUESTION: How important is the MX to our ability to prevent the Soviet Union from reloading its silos after having fired a first salvo?

ANSWER: The Soviets have contingency plans to reload and refire ICBMs from operational silos. They have stored reserve missiles and have made provisions to deliver them for reload. It would probably take several days to accomplish a reload action but the Soviets believe this capability is of significant value because they anticipate a nuclear conflict may be protracted. While the main value of PEACEKEEPER would be in prompt retaliation against Soviet strategic assets on alert, the system also inherently would have the potential to minimize the Soviet capability to reload, both by destroying the silos of the alert missiles and the hardened facilities where the reserve missiles are stored.

REALISTIC CAPABILITY

QUESTION: Do we have a realistic capability to reload our

ICBM silos during a nuclear war?

ANSWER: No. Our operational silos are not protected from launch exhaust effects and could not be reloaded without extensive refurbishment. In addition, there are not sufficient extra missiles at the operational units to reload more than one or two sites even if the silos could be restored to an operational configuration.

IMPORTANCE OF TIME URGENT HARD TARGET DESTRUCTION CAPABILITY

QUESTION: How important do you believe our time-urgent hard target destruction capability will be in the future to the maintenance of the credibility of our deterrent.

ANSWER: Such a capability is critical to maintaining our deterrent posture. An effective time-urgent hard target capability is essential to placing at risk the full range of hardened Soviet assets. These assets include not only Soviet ICBM silos but also their leadership and associated command and control facilities. The Soviets have vigorously pursued hardening programs to increase the survivability of such assets and are expected to continue with these efforts. A hard target capability must be maintained in the future in order to place at risk what the Soviets value most. By increasing the vulnerability of key Soviet targets, we not only deter Soviet aggression but also encourage them to consider a more serious approach to arms reductions. Should deterrence fail, our prompt hard target capability could be employed to disrupt Soviet warfighting capability, deny their war aims, and limit damage to the United States by direct attack of their command and control, hardened ICBM silos and strategic reserves.

FIRST STRIKE STRATEGY

QUESTION: Are we developing a first strike strategy?

ANSWER: No. The US has selected and sized its forces to enhance deterrence, not to achieve a disarming first strike capability.

QUESTION: If we were to develop a first strike strategy, would the presently planned force of MX missiles and TRIDENT D-5 missiles be sufficient to execute it?

ANSWER: A closer balance between the Soviet and US strategic forces will significantly raise the uncertainty for the Soviets in their assessment of gain/loss by a first strike, thus increasing the level of stability. The MX and TRIDENT D-5 missiles make significant strides in overcoming the imbalance of capability in timeliness, hard-target kill, and target coverage, all of which favor the Soviets today. In reinstating the strategic balance between the two powers, however, the US has deliberately not created the capability to conduct a credible first strike. The number of weapons to be deployed does not remotely ensure destruction of the entire Soviet ICBM force, the leadership of the Soviet Union or their command and control capability. This deliberate capability shortcoming clearly underlines the US nuclear strategy of deterrence and the maintenance of an effective retaliatory capability.

Soviet Target Base

QUESTION: Has the Soviet target base we must threaten grown in the past five years?

ANSWER: [Deleted].

In addition, the current target base has a number of dynamic characteristics as a result of Soviet warfighting concepts and planning geared to operations in specific geographic regions--"theaters of military operations" (TVDs). Peacetime installations lose their value, and dispersal locations gain value as the Soviets mobilize and relocate their forces in the crisis period. Many peacetime installations lose their target value. New targets are created. Target values rise and fall as leadership organizations and military units disperse, mobilize, train, move forward and suffer attrition during conventional operations.

Specifying these dynamic changes in target values is a formidable intelligence challenge, while adapting nuclear targeting to respond to such changes in the target base is an equally difficult challenge for the targeteers. Once the entities and assets that are critical to achieving Soviet objectives, by their own criteria of need, have been selected from the total target base, it is vital that we plan high levels of damage on these entities to preclude Soviet reconstitution of their key assets. Finally, deterrence will be enhanced by the Soviet perception that the US has the capabilities to influence the same kinds of stringent damage criteria on the USSR that the Soviets plan to inflict on the US and our Allies.

GROWTH IN HARD TARGETS

Senator D'Amato: Has the percentage of that target base we would characterize as very hard targets increased over the last five years?

General Vessey: [Deleted].

These are silos we must threaten for stable deterrence, given the critical role of these assets in Soviet warfighting plans.

[Deleted].

As a result of this Soviet effort, there is a basic assymetry in U.S. and Soviet strategic targeting: The number of targets which the US must threaten to deny Soviet war aims that are hardened to 200 psi or more is roughly triple the number of similar targets that the USSR must be prepared to destroy or neutralize in order to achieve Soviet war aims against the US, NATO Europe and the PRC. Less than one-half of the critical Soviet targets that the US must threaten for deterrrence are subject to reduction in strategic arms control negotiations.

Moreover, US weapons systems designed to put soft industrial structures at risk are not well suited for threatening hardened targets.

QUESTION: Do we now have a realistic time-urgent capability to destroy most of these very hard Soviet targets?

ANSWER: No. The best current time-urgent weapon that we have is the MINUTEMAN III/Mark 12A warhead. Yet, as the figures below show, the probability of damage which the MINUTEMAN III/

Mark 12A conflict on a Soviet SS-18 silo (assuming the arrival of a properly functioning weapon) is rather minimal especially when compared to the damage the SS-18 can do against a MINUTEMAN silo.

PROBABILITY OF DAMAGE

[Deleted].

TIME URGENT CAPABILITY

QUESTION: Is it important for us to have a time-urgent capability to destroy most of these very hard targets?

ANSWER: Yes, a time-urgent hard target can be defined as an installation that is hardened to increase its survivability and could contain a weapon (or weapon system) which, if not destroyed, could inflict damage upon the US or its allies. Examples of time urgent hard targets include ICBM silos, aircraft shelters, submarine tunnels. To enhance deterrence, a time-urgent hard target kill capability allows these targets to be held at risk, thereby creating uncertainty in the mind of the Soviet leaders that these assets will survive to support their objective.

QUESTION: What do we lose if the Soviet Union is able to shelter progressively more of its important personnel, facilities, and military and economic capabilities from our ability to retaliate in a nuclear war?

ANSWER: Deterrence requires that we convince the Soviet Union that we can and will respond in kind to any strategic nuclear attack. An effective Soviet sheltering program that limits our ability to respond and impose unacceptable damage on Soviet targets would weaken the US deterrence.

ABM Capability

Senator D'Amato: How military significant are Soviet efforts to develop an ABM capability for the SA-10 and SA-X-12?

General Vessey: [Deleted].

IMPACT OF SOVIET AIR DEFENSES

QUESTION: How much of an impact will Soviet air defenses have in reducing our ability to penetrate their territory with bombers and cruise missiles in the next five years?

ANSWER: The current Soviet air defenses have good capability against medium and high altitude penetrators but have deficiencies in tracking and engaging low altitude penetrators. These air defenses are presently undergoing significant changes as the Soviets are fielding a new look-down/shoot-down system (FOXHOUND A), a new SAM with significant low-altitude capability (SA-10), and a series of new modern EW/GCI radars. As the Soviets continue to deploy these new systems, penetration of the Soviet landmass by our currently operational systems will become increasingly difficult. During the next five years, however, as the B-1B with its reduced radar cross section and advanced avionics is

deployed and improvements are made to the present generation of cruise missiles, the net effect will tend to balance out the air defense upgrades the Soviets are currently making.

IMPACT OF ABM DEVELOPMENTS

QUESTION: How much of an impact will their ABM developments have on our ability to be certain we can destroy specific, high value targets, if we do not deploy the MX? If we do deploy the MX?

ANSWER: Deployment of an improved and enlarged ABM system would represent a major political as well as strategic challenge to the United States. An effective ABM system would probably require the Soviets to withdraw from or violate the ABM Treaty. The current strategic situation dictates that the US retain the flexibility to deploy the planned number of PEACEKEEPER (MX) warheads to hold the Soviet hard-target structure at risk while retaining the capability to carry and deploy decoys and other penetration aids. This capability is essential, pending successful arms control negotiations, to avoid technological surprise or abrogation of the ABM Treaty.

The PEACEKEEPER (MX) provides this growth option to counter Soviet ABM developments while retaining our ability to hold specific, high value targets at risk.

IMPORTANCE OF EXTRA THROW-WEIGHT OF M-X

QUESTION: If the Soviets press ahead with ABM development, how important is the extra throw-weight of the M-X in terms of assuring warhead penetration of any projected Soviet defenses?

ANSWER: The possibility of either a sudden Soviet breakthrough in ABM technology, a rapid Soviet breakout from the ABM Treaty, or the deployment of Soviet air defense systems also having some capability against strategic ballistic missiles all point to the need for us to be able to penetrate some level of Soviet ABM defense. This dictates continued attention to having sufficient throw-weight for adequate numbers of warheads and of decoys or other penetration aids.

The improved throw-weight of the Peacekeeper (M-X) could provide the option in the future to add such penetration aids or maneuvering reentry vehicles with terminal guidance systems, if these become necessary to preserve U.S. ICBM effectiveness and assure warhead penetration of any projected Soviet defenses. The constrained throw-weight of a small missile or of an improved Minuteman III could preclude the addition of penetration aids or heavier reentry vehicles without significant range and footprint performance penalities, and, consequently, decreased target coverage. Without the growth option provided by the extra throw-weight of the Peacekeeper, the U.S. may not be able to respond to Soviet strategic initiatives, and could concede an important advantage to the Soviet Union — or be forced to embark on a costly new missile development program in the future, based on some Soviet breakthrough or deployment.

SIBM PERFORMANCE

QUESTION: Will the Small Intercontinental Ballistic Missile do as well as an M-X in dealing with an ABM defense?

ANSWER: The President's Commission on Strategic Forces recommended that engineering design of a small, single warhead ICBM be initiated. Preliminary activities have already begun in preparation to conduct such a program, if approved by the Congress. An engineering design program of this type is expected to take approximately three years to complete and will address the capabilities of the newly developed missile to deal with ABM defenses. However, the size of the small ICBM might constrain its capabilities to deal with ABM defenses.

CRITICAL ABM DEVELOPMENTS

QUESTION: How critical are ABM developments to the future of the small ICBM concept?

ANSWER: The small ICBM, recommended for engineering design by the President's Commission on Strategic Forces, would have to contend with the same Soviet ABM systems that face the presently deployed ICBM forces.

When addressing the interface between the small ICBM and U.S. ABM systems, ABM (or BMD) contributions are dependent on the basing mode selected for the small ICBM (silo or mobile, etc) and the number of small ICBMs that might be recommended for deployment.

QUESTION: How important to the military effectiveness and therefore the credibility of our deterrent is the ability we have with our ICBM force to rapidly retarget that force in response to our targeting priorities, the U.S. forces which have survived an attack, and the targets in the Soviet Union which must be attacked in retaliation?

ANSWER: The capability to rapidly retarget and launch ICBM as well as other strategic forces that survive a Soviet attack is a key element of deterrence.(D) This capability substantially complicates the Soviets war planning and war fighting efforts and thus enhances our military effectiveness.

QUESTION: How important to the military effectiveness and therefore the credibility of our deterrent is the ability we have with our ICBM force to quickly determine how many missiles have survived an attack and are available for use in retaliation?

ANSWER: Command and control of our ICBM forces throughout a nuclear exchange is an essential element of deterrence. [Deleted] [deleted]. This information would also provide leverage for the NCA in successful conflict terminations.

Senator D'Amato: How certain are you that we can design a C-cubed system which will provide the National Command Authority with secure, survivable communications with the proposed small mobile ICBM?

Answer: We have high confidence that the C3 systems that are currently programmed will provide the National Command Authorities with secure, survivable communications with the proposed small mobile ICBM. Programs such as the groundwave

emergency network (GWEN), Milstar, and Mobile Command Centers are being designed to provide highly survivable and enduring C3 capabilities. Assuming that the small mobile ICBM included command and control equipment which was compatible with these systems, we have high confidence that secure, survivable communications to the small, mobile ICBM would be at least as survivable and enduring as the weapons system.

QUESTION: How well does the mix of strategic warheads we believe would survive a Soviet surprise counterforce attack against an ungenerated US force posture match the target base we must be certain of destroying in the USSR in terms of yield fuzing, mode of delivery, and probable time of arrival on target?

ANSWER: Since our mix of TRIAD forces provides a variety of basing modes and capabilities, the Soviets cannot conduct preemptive attacks on all legs of the TRIAD simultaneously. As the President's Commission correctly noted, US forces must be examined together, not in isolation. In a surprise counterforce attack, the Soviets would also be expected to attack our C^3I. In such an attack, a significant number of weapons would impact on US bomber bases and C^3I facilities prior to any enemy weapons arriving on our ICBM fields. Therefore, a significant portion of our ICBM force could launch before any major attack was completed. Based on our current day-to-day posture, we could expect approximately of the total US weapons to survive. Based on today's capability, the ICBMs provide our only time urgent capability, and they have only a marginal capability against hard targets. The SLBMs have high survivability but little hard target capability. The surviving bomber weapons provide hard target kill capability; however, they do not arrive in a timely manner. Generally, our analyses indicate that if the Soviets initiated an attack they would accrue an advantage, both in terms of damage to strategic targets and post-exchange residual weapons. That advantage does not begin to decrease until the US is well along with the President's strategic modernization program.

QUESTION: Has the "goodness of fit" of our forces to the Soviet target base as described in question 48 improved or deteriorated over the past five years?

ANSWER: There have been some quality improvements to our strategic forces over the last five years. The Air Launched Cruise Missile was introduced and the warhead was improved on a portion of the deployed MINUTEMAN III missiles. However, the Soviets have, during the same period, made great strides in improving their first strike capability against our hardened land based nuclear weapon systems. Additionally, they have vigorously pursued a program of providing protection for their leadership through deep, hard, urban shelters and an extensive network of hardened relocation sites outside the cities, with redundant communications systems. They have significantly hardened their ICBM silos. These factors, added to the elaborate Soviet plans for dispersion of military units and key civilian workers, have caused the Soviet target base to change dramatically. Consequently, our ability to hold that target base at risk has deteriorated.

QUESTION: How will this "goodness of fit" change if the strategic modernization program is fully implemented? If it is cancelled?

ANSWER: The Strategic Modernization Program provides the initial measures that address the current less-than-satisfactory capability of our strategic systems to hold at risk or destroy, in a retaliatory attack, those highly valued military and leadership elements key to the achievement of Soviet war aims. The MX and D-5 ballistic missile systems and bomber modernization efforts, including the B-1B, the Advanced Technology Bomber and the air launched cruise missile, will possess sufficient accuracy and power to counter the present Soviet monopoly in large accurate ICBMs and to hold at risk the full range of Soviet assets. When fully deployed, the MX will bolster deterrence by eroding Soviet confidence in their ability to conduct successfully a disarming first strike against the United States. The D-5 missile will provide improved capability in prompt hard target kill capability, offsetting the advantage held by the Soviet Union with their larger numbers of powerful ICBMs. If cancelled, deterioration of the US capability vis a vis that of the Soviet Union will continue.

Questions Submitted by Senator Proxmire

(Response by Secretary Weinberger)

Peacekeeper Deployment

QUESTION: First, do you have any paper studies underway involving potential benefits of deploying more than 100 MX missiles?

ANSWER: There are more than ten years worth of studies on the size of and basing for the Peacekeeper programs. What is important is what the President has proposed to the Congress based on the recommendations of the Scowcroft Commission. And that, as you know, is the deployment of 100 Peacekeepers, research and development on a new small single warhead ICBM and on advanced hardening techniques, and a modification of our START proposal.

Size of Peacekeeper Missile Deployments

QUESTION: Second, if the Midgetman missile encounters technical difficulties, funding constraints, or problems associated with security and public acceptance, then can you envision the need for more MX deployments beyond 100 missiles?

ANSWER: We believe the President's program is realistic and achievable. If the Congress will approve it and fund it, we can move forward on both Peacekeeper and the small missile.

Peacekeeper Deployment Costs

QUESTION: Third, with the MX missile production line open, won't the sunk costs argument and timeliness argument inevitably make an MX deployment beyond 100 more attractive?

ANSWER: No.

QUESTIONS SUBMITTED BY SENATOR PROXMIRE

(RESPONSE BY GENERAL VESSEY)

CRITIQUE OF MIDGETMAN CONCEPTS

QUESTION: General Vessey, would you please provide the Committee with a critique of the Midgetman concept including an assessment of

(a) total system costs
(b) vulnerability to attack
(c) security at deployment sites and transit areas
(d) public acceptance issues involving deployment of Midgetman near populatation centers of wide geographic areas.

ANSWER: The President's Commission on Strategic Forces recommended that (1) engineering design be initiated on a single-warhead ICBM weighing about fifteen tons, and (2) hardened shelters or hardened mobile launchers for such a small missile be investigated. Preliminary conceptual work in preparation for conducting such an effort has recently begun.

In the Strategic Forces Technical Assessment Review, 31 Mar 83, preliminary (Cost Category IV) estimates for deploying the small missile ranged from $40-$70 billion (FY 82$), depending upon the basing mode selected. However, these were rough approximate costs and will be refined as engineering design and technological programs, recommended by the Commission, proceed.

During the vigorous investigations of the small ICBM and its candidate basing modes (including silos and mobile), assessment of life cycle costs, survivability, physical security, and public interface will be conducted.

COMMITTEE RECESS

The committee will stand in recess subject to the call of the Chair.

[Whereupon, at 12:25 p.m., Thursday, May 5, the committee was recessed, to reconvene at the call of the Chair.]

SENATE CONCURRENT RESOLUTION 26, A RESOLUTION TO APPROVE FUNDING FOR THE MX MISSILE

TUESDAY, MAY 10, 1983

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The committee met at 10:15 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Mark O. Hatfield (chairman) presiding.

Present: Senators Hatfield, Mattingly, Stennis, and DeConcini; also present Senator Warner.

CONGRESSIONAL WITNESSES

STATEMENT OF HON. JOHN TOWER, U.S. SENATOR FROM TEXAS

OPENING STATEMENT OF CHAIRMAN HATFIELD

Chairman HATFIELD. The hearing will come to order.

This is the fourth day of hearings before this committee to receive testimony on the President's proposal to deploy 100 MX missiles in existing Minuteman silos. We have heard earlier Adm. Stansfield Turner and Dr. McGeorge Bundy, who were critical of the deployment scheme on the implication for destabilizing our strategic nuclear forces. We have also heard from Gen. Brent Scowcroft, Chairman of the President's Commission on Strategic Forces; Mr. Kenneth Dam, Deputy Secretary of State; Hon. Caspar Weinberger; and the Chairman of the Joint Chiefs of Staff, Gen. John Vessey. All of these gentlemen testified that the MX missile was necessary to modernize our existing ICBM stretegic capability and assure good-faith negotiations by the Soviets.

INTRODUCTION OF SENATORS TOWER AND JACKSON

Today we have before the committee our distinguished colleague, Senator John Tower, chairman of the Senate Armed Services Committee, and Senator Jackson. Gentleman, we welcome you before the committee. We will print your entire statement, and you may proceed to summarize or highlight it as you wish.

Senator TOWER. Thank you very much, Mr. Chairman.

I appreciate very much your affording Senator Jackson and me the opportunity to appear before you today on the subject of the President's proposal for the modernization of our strategic forces in

general, and that involving the land-based element of our nuclear deterrent in particular.

I will be testifying in my capacity as chairman of the Senate Committee on Armed Services and Senator Jackson as the very distinguished, and I might say extremely knowledgeable, ranking minority member on that committee.

We have in the Armed Services Committee been conducting in full committee and in the Strategic and Theater Nuclear Forces Subcommittee very extensive hearings on this matter. We have built quite a record of hearings. I might ask permission to enter some of that material in the record, Mr. Chairman, if that is agreeable.

Chairman HATFIELD. I would be happy to receive it.

[The information follows:]

PREPARED STATEMENT OF HON. JOHN TOWER, U.S. SENATOR FROM TEXAS

Mr. Chairman and Members of the Committee, I appreciate your affording me an opportunity to appear before you today to discuss the subject of the President's proposal for the modernization of our strategic forces, in general, and that involving the land-based element of our nuclear deterrent, in particular.

I am testifying in my capacity as Chairman of the Senate Committee on Armed Services which has been conducting in full Committee and in its Strategic and Theater Nuclear Forces Subcommittee extensive hearings on these matters. While the views I will express are my own, they have been informed by the weight of the testimony made available to us in the course of our open and closed sessions. Hopefully, the following assessment of the material presented to our Committee will be of use to the Members of this panel in your forthcoming action on the resolution of approval provided for in the Fiscal Year 1983 Continuing Resolution.

The distinguished Chairman of this Committee, Senator Hatfield, is to be commended for the forthright and expeditious manner in which he has moved forward with the consideration of this Resolution. I would respectfully disagree with the assertion attributed to him by the press, however, that the issue upon which the Membership will be asked to vote is narrowly circumscribed.

It has been suggested that Senators must, in acting on this Resolution of Approval, consider only the MX basing component thereof, in isolation and without reference to other key elements of the package.

In my judgment, no one should be under any illusion that this early vote in Committee is other than a test vote on the acceptance by the Congress of the broad outline of the Scowcroft Commission's recommendations.

The findings and recommendations of the President's Commission on Strategic Forces are, by this time, well known to all Members of this Committee. I will not take your time to repeat them except to highlight several of the points made by the Scowcroft Panel which are especially noteworthy and which, as a result of their subsequent endorsement by President Reagan, now constitute the official views and policies of his Administration.

Let me begin by noting that General Scowcroft and his colleagues have indicated—in my view correctly—that we, as a Nation, stand at a most important crossroad. At long last, a decision is about to be made by the Congress whereby we will finally choose whether or not this Nation will modernize its aging intercontinental ballistic missile force—elements of which have been in the inventory since the early 1960's—with modern systems of vastly greater reliability and capability. In its report, and in congressional testimony, the Scowcroft Commission has elucidated carefully the implications this decision holds for us, for our allies and for our adversaries. I would like to dwell for a moment on these potential implications—both adverse and positive.

There can be little doubt that our failure to proceed with deployment of the MX missile at this time in the manner recommended by the blue-ribbon Scowcroft Commission and the President, will have severe and untoward consequences. One can only speculate what such consequences might be. It does not seem unreasonable to me, however, that they might include some or all of the following:

The emergence of complete Soviet intransigence at the negotiating table in Geneva, effectively forclosing realistic possibilities for substantive progress in talks on strategic arms reductions and intermediate-range nuclear forces;

The Soviets may interpret our inability to muster the necessary political resolve to modernize that component of strategic power—the ICBM—which they consider to be the most important, as a sign of paralysis. The fact that we might forego such modernization—even when confronted by the enormous investment of resources in such weapons by the Soviets themselves—could lead to a reevaluation by the Soviet leadership of the so-called "correlation of forces," a development which might encourage increased assertiveness and aggression on the part of the U.S.S.R.

A refusal on the part of our Western European allies to proceed with deployment of Pershing II and ground-launched cruise missiles on their soil;

Dissipation of public support in the United Kingdom and France for the planned modernization of their independent nuclear deterrent forces.

In short, the weight of expert testimony before the Committee has indicated that significant risks attend a decision not to go forward with production and deployment of the MX missile as recommended by the bipartisan Scowcroft Commission and by the President.

What is more, testimony taken by our Committee from supporters and critics of the Scowcroft Report has indicated, on balance, that the decision to proceed at this time with the package of initiatives recommended by General Scowcroft and his co-panelists holds significant promise for a strategic balance characterized by greater stability, smaller numbers of nuclear weapons, and a reduction in the risk of nuclear war.

Specifically, many of our expert witnesses, including the Chairman and members of the Scowcroft Commission, the Secretary of State, the Secretary of Defense, the Joint Chiefs of Staff and the Commander-in-Chief of the Strategic Air Command, stated their common belief that a production go-ahead on MX was indispensable to the success of our arms control negotiating efforts. Where we have tried previously to afford both the carrot and the stick as incentives to Soviet negotiators we have achieved notable success. The ABM accord is an oft-cited case in point and the recent Andropov proposal regarding intermediate range nuclear forces suggests that this principle still applies.

Absent credible bargaining leverage, however, we have seen negotiations aimed at achieving such objectives as Mutual, Balanced Force Reductions, bans on chemical and anti-satellite warfare, and verifiable agreements on, among other things, nuclear testing, drag on and on inconclusively. The Soviets are unrivalled masters of diplomatic intransigence when the perceive such behavior to be in their interest.

To realize such important beneficial consequences as those envisioned by many of our witnesses, the recommendations of the President's Commission must be regarded—and acted upon—by the Congress as a package. The present resolution is uniquely suited for this purpose. While the Senate will shortly have before it the Defense Authorization bill, in which the various components of the Scowcroft recommendations will be explicitly addressed, an opportunity is afforded in this symbolic resolution to affirm the broad outlines of the revised ICBM modernization and arms control program submitted by the President.

That being said, it might be useful to this Committee to have a preview of the action I expect the Armed Services Committee to take with respect to this program in the fiscal year 1984 Defense Authorization bill. I believe that we will render explicit in the law the commitment made by the President not only to limited procurement and Minuteman siting of the MX missile, but to an aggressive research and development effort on the small ICBM, as well. My expectation is that our bill will also support the range of developmental activities intended to explore alternatives for enhancing, in the future the survivability of the MX and/or a small ICBM force.

Furthermore, I anticipate that we will strongly encourage the pursuit of a strategic arms reduction agreement whose emphasis will be upon obtaining increased nuclear stability through reductions in warheads and missile payloads rather than cuts in launches.

At this point, with a sense of the nature of the recommendations likely to be made by the Senate Armed Services Committee and with confidence that in imminent opportunity will be afforded to all Senators to act in the context of the Defense Authorization bill on specific elements of the Scowcroft Commission recommended program, I believe that members of this committee should consider the vote they are about to cast on the pending resolution of approval as a vehicle for weighing the merits of this program as a complete package.

Having said that, permit me to address in closing perhaps the most controversial component of those recommendations. That is, the issue of the survivability of the proposed MX basing mode. I have been among the most vocal adherents to the theory that each element of our strategic forces should—to the maximum degree feasible—be constituted of systems whose retaliatory capability will not be severly

degraded by a Soviet first-strike. My views as to the means whereby such survivability could be afforded to the MX missile are a matter of record.

I am prepared at this time, however, to concur in the findings of the Scowcroft Commission, that the *Real* "windows of vulnerability" is the present and growing imbalance between U.S. and Soviet prompt, hard-target kill capable forces. I join the President's Commission in concluding that the earliest possible deployment of the MX is needed to redress this important deficiency.

While it is regretable that, for a variety of political, technical and budgetary reasons the Administration and the Congress have foreclosed options which might have resulted in such an earliest feasible deployment of MX in a survivable basins system, I believe that the Commission's finding is correct that further delay in MX deployment could be perilous to our security and that of our allies. The package of future missile and basing research and development alternatives coupled with the immediate deployment of the MX in Minuteman silos, represents the best option available to us today for the modernization of our land-based strategic forces.

In conclusion, I commend to the Members of this Committee for their favorable consideration the recommendations of the Scowcroft Commission and of President Reagan. I believe the record complied to date by the Senate Armed Services Committee and its Subcommittee on Strategic and Theater Nuclear Forces supports an affirmative report by this Committee of the pending Resolution of Approval to the full Senate. I urge the Distinguished Members of this Panel to do so with dispatch.

STATEMENT OF SENATOR TOWER

Senator TOWER. While the views I will express are my own, they have been informed by the weight of the testimony made available to us in the course of our open and closed sessions. Hopefully the following assessment of the material presented to our committee will be of use to the members of this panel in your forthcoming action on the resolution of approval provided for in the fiscal year 1983 continuing resolution.

The distinguished chairman of this committee is to be commended for the forthright and expeditious manner in which you, sir, have moved forward with the consideration of the resolution. I would somewhat respectfully disagree, however, sir, with your assertion that the issue, at least as reported in the press, that the issue upon which the membership will be asked to vote is narrowly circumscribed. It has been suggested that Senators must, in acting on this resolution of approval, consider only the MX basing component thereof, in isolation and without reference to other key elements of the package.

In my judgment, no one should be under any illusion that this early vote in committee is other than a test vote on the acceptance by the Congress of the broad outlines of the Scowcroft Commission's recommendations.

The findings and recommendations of the President's Commission on Strategic Forces are by this time well known to all members of this committee. I will not take your time to repeat them, except to highlight several of the points made by the Scowcroft panel which are especially noteworthy and which, as a result of their subsequent endorsement by President Reagan, now constitute the official views and policies of his administration.

MODERNIZATION OF ICBM FORCE

Let me begin by noting that General Scowcroft and his colleagues have indicated, in my view correctly, that we as a nation stand at a most important crossroad. At long last a decision is about to be made by the Congress whereby we will finally choose

whether or not this Nation will modernize its aging intercontinental-ballistic-missile force—elements of which have been in the inventory since the early sixties—with modern systems of vastly greater reliability and capability. In its report, and in congressional testimony, the Scowcroft Commission has elucidated carefully the implications this decision holds for us, for our allies, and for our adversaries. I would like to dwell for a moment on these potential implications, both adverse and positive.

RESULTS OF FAILURE TO DEPLOY MX

There can be little doubt that our failure to proceed with deployment of the MX missile at this time in the manner recommended by the blue-ribbon Scowcroft Commission and the President will have severe and untoward consequences. One can only speculate what such consequences might be. It does not seem unreasonable to me, however, that they might include some or all of the following:

The emergence of complete Soviet intransigence at the negotiating table in Geneva, effectively foreclosing realistic possibilities for substantive progress in talks on strategic arms reductions and intermediate-range nuclear forces.

The Soviets may interpret our inability to muster the necessary political resolve to modernize that component of strategic power, the ICBM force, which they consider to be the most important, as a sign of paralysis. The fact we might forgo such modernization, even when confronted by the enormous investment of resources in such weapons by the Soviet leadership of the so-called correlation of forces, a development which might encourage increased assertiveness and aggression on the part of the U.S.S.R.

A refusal on the part of our Western European allies to proceed with deployment of Pershing II and ground-launched cruise missiles on their soil.

Dissipation of public support in the United Kingdom and France for the planned modernization of their independent nuclear-deterrent forces.

BARGAINING POWER OF MX DEPLOYMENT

In short, the weight of expert testimony before the committee has indicated that significant risks attend a decision not to go forward with production and deployment of the MX missile as recommended by the bipartisan Scowcroft Commission and by the President.

What is more, testimony taken by our committee from supporters and critics of the Scowcroft report has indicated, on balance, that the decision to proceed at this time with the package of initiatives recommended by General Scowcroft and his copanelists holds significant promise for a strategic balance characterized by greater stability, smaller numbers of nuclear weapons, and a reduction in the risk of nuclear war.

Specifically, many of our expert witnesses, including the Chairman and members of the Scowcroft Commission, the Secretary of State, the Secretary of Defense, the Joint Chiefs of Staff, and the commander in chief of the Strategic Air Command, stated their common belief that a production go-ahead on MX was indispens-

able to the success of our arms-control negotiating efforts. Where we have tried previously to afford both the carrot and the stick as incentives to Soviet negotiators we have achieved notable successes. The ABM accord is an oft-cited case in point, and the recent Andropov propcsal regarding intermediate-range nuclear forces suggests that this principle still applies.

Absent credible bargaining leverage, however, we have seen negotiations aimed at achieving such objectives as mutual, balanced force reductions, bans on chemical and antisatellite warefare, and verifiable agreements on, among other things, nuclear testing, drag on and on inconclusively. The Soviets are unrivaled masters of diplomatic intransigence when they perceive such behavior to be in their interest.

To realize such important beneficial consequences as those envisioned by many of our witnesses, the recommendations of the President's Commission must be regarded, and acted upon, by the Congress as a package. The present resolution is uniquely suited for this purpose.

While the Senate will shortly have before it the defense authorization bill, in which the various components of the Scowcroft recommendations will be explicitly addressed, an opportunity is afforded in this symbolic resolution to affirm the broad outlines of the revised ICBM modernization and arms-control program submitted by the President.

ACTIONS BY ARMED SERVICES COMMITTEE

That being said, it might be useful to this committee to have a preview of the action I expect the Armed Services Committee to take with respect to this program in the fiscal year 1984 defense authorization bill. I believe that we will render explicit in the law the commitment made by the President not only to limited procurement and Minuteman siting of the MX missile, but to an aggressive research and development effort on the small ICBM as well. My expectation is that our bill will also support the range of developmental activities intended to explore alternatives for enhancing in the future the survivability of the MX and/or a small ICBM force.

Furthermore, I anticipate that we will strongly encourage the pursuit of a strategic arms-reduction agreement whose emphasis will be upon obtaining increased nuclear stablility through reductions in warheads and missile payloads rather than cuts in launchers.

At this point, with a sense of the nature of the recommendations likely to be made by the Senate Armed Services Committee, and with confidence that an imminent opportunity will be afforded to all Senators to act in the context of the defense authorization bill on specific elements of the Scowcroft Commission recommended program, I believe that members of this committee should consider the vote they are about to cast on the pending resolution of approval as a vehicle for weighing the merits of this program as a complete package.

SURVIVABILITY OF MX BASING MODE

Having said that, permit me to address in closing perhaps the most controversial component of those recommendations. That is the issue of the survivability of the proposed MX basing mode. I have been among the most vocal adherents to the theory that each element of our strategic forces should, to the theory that each element of our strategic forces should, to the maximum degree feasible, be constituted of systems whose retaliatory capability will not be severely degraded by a Soviet first strike. My views as to the means whereby such survivability could be afforded to the MX missile are a matter of record.

I am prepared at this time, however, to concur in the findings of the Scowcroft Commission that the real "window of vulnerability" is the present and growing imbalance between United States and Soviet prompt, hard target kill capable forces. I join the President's Commission in concluding that the earliest possible deployment of the MX is needed to redress this important deficiency.

While it is regrettable that, for a variety of political, technical, and budgetary resources, the administration and the Congress have foreclosed options which might have resulted in such an earliest feasible deployment on MX in a survivable basing system, I believe that the Commission's finding is correct that further delay in MX deployment could be perilous to our security and that of our allies. The package of future missile and basing research and development alternatives, coupled with the immediate deployment of the MX in Minuteman silos, represents the best option available to us today for the modernization of our land-based strategic forces.

In conclusion, I commend to the members of this committee for their favorable consideration the recommendations of the Scowcroft Commission and of President Reagan. I believe the record compiled to date by the Senate Armed Services Committee and its Subcommittee on Strategic and Theater Nuclear Forces supports an affirmative report by this committee of the pending resolution of approval to the full Senate. I urge the distinguished members of this panel to do so with dispatch.

Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you very much, Chairman Tower.

Senator Jackson.

STATEMENT OF HON. HENRY M. JACKSON, U.S. SENATOR FROM WASHINGTON

Senator JACKSON. Thank you, Mr. Chairman. I am delighted to be here with the chairman of my Committee on Armed Services, Senator Tower. I want to express my appreciation to you for having this set of hearings which are so important in terms of arms-control negotiations that are now underway as well as meeting the security needs of our country.

Mr. Chairman, may I ask that my entire statement go in the record.

Chairman HATFIELD. It will be received. Thank you.

[The statement follows:]

PREPARED STATEMENT OF HON. HENRY M. JACKSON U.S. SENATOR FROM WASHINGTON

Mr. Chairman, I requested the opportunity to testify before you today to join Senator Tower and others in urging support for the President's proposal for modernization of our land-based ICBM forces. Specificially, I am here to urge you and your colleagues to report favorably the concurrent resolution provided for in P.L. 97-377.

I want to share with you my reasons for supporting the President's proposal and, in particular, to give my assessment of the necessity for deploying the MX in existing silos.

For about a quarter of a century our nuclear deterrence based on a triad of forces has proven effective in inhibiting Soviet adventurism and maintaining the peace. The strongest leg of that triad has been until recently the land-based ICBM force. Now because of efforts by the Soviets to harden their important military assets which we would target, our Minuteman III force is no longer sufficiently effective as a counterforce to a first strike by the Soviets. Modernization of the land-based ICBM force is required to maintain deterrence by restoring our ability to retaliate promptly against such targest as the Soviet national command structure.

In addition, we must restore the credibiity of our land-based ICBM force to maintain the survivability of our strategic bomber and sea-based nuclear deterrence forces. The symbiotic relationship between the three legs of the triad in terms of deterrence is well established. The triad forces are mutually reinforcing and severely complicate the problem of Soviet planners. However, if the Soviet leaders become convinced that our land-based ICBM force is not a sufficient deterrent, they will be able to concentrate their efforts how to attack the sea-based and bomber forces. They might, for instance, adopt a strategy of attacking the bomber force first before most of it can become airborne.

Some find solace in stating that there is essential parity today between the Soviet Union and the United States in strategic systems. However, Soviet deployments of modern strategic systems over the past 10 years have created a very disturbing trend. Furthermore, the current Soviet efforts are relentless in the development of new systems. For instance, there are reports of new ICBMs undergoing flight tests. Additionally, deployment of an upgraded ABM system around Moscow appears to be nearing completion.

We must not only worry about deterrence of the strategic Soviet force, but also the imposing Soviet conventional forces. While we must maintain strong conventional war-fighting capabilities, they alone will not deter the Soviets unless we maintain parity in strategic forces. Not only our resolve to stand up to Soviet aggression is at stake, but the resolve of our allies and other peace-loving nations to stand up to Soviet and Soviet surrogates' aggression is dependent on the perception by all parties of our will and capability.

The message from these facts is clear to me. We must modernize our land-based ICBM force and at the same time we must seek to negotiate with the Soviets a balanced, verifiable reduction in strategic armanents. These are the two cornerstones of the President's proposal.

However, we should not delay the modernization program in the hope that a treaty on nuclear arms reduction will be readily achieved. I believe that the Soviets will seriously negotiate toward such a treaty only with our modernization program going forward. This is testified to by history where the ABM treaty was negotiated only after the Congress approved a limited deployment of an ABM system.

The content of a modernization program for the land-based ICBMs—MX deployment as well as the development and deployment of a new, small, single RV ICBM—has been well described in the Scowcroft Commission report. The deployment of MX missiles in existing silos provides the counterforce capability to attack hard-targets. If there is success in the treaty negotiations, this decision can be reviewed to limit or lower the number of MX missiles. An adjunct to MX deployment in existing silos should be an on-going program to evaluate alternative basing modes such as deep-underground basing. However, given the 10-year history of countless basing proposals, it would be a mistake to delay deployment any longer in hope of finding a better solution. The trade-offs among such factors as cost, environment, land-use, security and survivability will make it difficult to find an ideal basing mode. While full survivability is not possible in existing silos, MX deployment in them will complicate the Soviet planners problem by reinforcing the land-based leg of the triad and thus increasing the survivability of the other two legs of the triad.

There are those who advocate the further upgrading of the Minuteman III force rather than deploying the MX. This proposal would cost about 60 percent of the MX deployment cost with several negative aspects. The MX would still have a better hard-target kill capability due to an improved warhead design with potentially a

higher yield. The range of the Minuteman III would be further reduced and the MIRV footprint would be affected. The accuracy might not be as good as the MX since it is an adaption rather than a fully integrated design. Also, it might not be available until 2 years after the MX deployment.

A program for development of a small ICBM, which could be mobile for deployment in the 1990's should be vigorously pursued. While there are many technical questions to be answered, it offers the clear possibility of nullifying the accuracy of the Soviet missiles, by increasing the positional uncertainty of the target. This would greatly complicate the Soviet planners task and further strengthen the land-based ICBM force. The small, single warhead ICBM could contribute to nuclear arms reduction by allowing us to eliminate over time the multiple warhead missiles.

I think it important, however, to point out that there will undoubtedly be opposition to the deployment of the so-called Midgetman missile from many of the same groups opposing the MX. Issues of arms reduction, verification, environmental effects, possible use of non-Federal land on alerts, cost due to its manpower intensive nature, and command and control must all be resolved.

There is a tendency to want to wait for the next generation of technology believing that it will be available on schedule, on cost, and will be more acceptable than the current system. That approach may be acceptable in coal gasification technology or automotive developments, but it is not prudent in planning and maintaining our National defense.

We must meet the growing threat by pressing forward and showing a national will to do what is necessary until such time as treaty negotiations are successfully concluded. A decision not to deploy the MX missile would, in effect, be a unilateral freeze of our land-based deterrent. It would increase the vulnerability of our strategic bomber force and put unacceptable dependence on our sea-based strategic forces.

I encourage you, Mr. Chairman, and other Members of this Committee to study the Scowcroft Commission report. If you do, I believe you will come to share my view that deployment of the MX in existing silos would be an important addition to our strategic deterrent capability.

TRIAD FORCE

Senator JACKSON. For about a quarter of a century, our nuclear deterrence based on a triad of forces has proven effective in inhibiting Soviet adventurism and maintaining the peace. The strongest leg of that triad has been until recently the land-based ICBM force. Now, because of efforts by the Soviets to harden their important military assets which we would target, our Minuteman III force is no longer sufficiently effective as a counterforce to a first strike by the Soviets. Modernization of the land-based ICBM force is required to maintain deterrence by restoring our ability to retaliate promptly against such targets as the Soviet national command structure.

We must not only worry, Mr. Chairman, about deterrence of the strategic Soviet force but also the imposing Soviet conventional forces. While we must maintain strong conventional war-fighting capabilities, they alone will not deter the Soviets unless we maintain parity in strategic forces. Not only our resolve to stand up to Soviet aggression is at stake, but the resolve of our allies and other peace-loving nations to stand up to Soviet and Soviet surrogates' aggression is dependent on the perception by all parties of our will and capability.

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Mr. Chairman, I want to encourage you and other members of this committee to study very carefully the Scowcroft Commission report. If you do, I believe you will come to share my view that the deployment of the MX in existing silos would be an important addition to our strategic deterrent capability.

Thank you.

Chairman HATFIELD. Thank you, Senator Jackson.

Senator Warner, did you have a statement?

Senator WARNER. No.

Chairman HATFIELD. Let me outline the plan of the committee at this time. It is our plan to complete the hearings this morning—this will be our fourth session of hearings—hopefully move to a markup by the committee by Thursday, and then have it on the floor for action next week.

We have tried to expedite in every way possible this decision which confronts this committee and the Senate as a whole.

My question to you gentlemen is from an appropriations point of view. If the Senate refuses to adopt the resolution that I have introduced, I believe there is a request by the administration for $6.2 billion in fiscal year 1984 on the matter of the MX missile, which I assume would be in the authorizing legislation which you are about ready to move to markup, would you then delete under that scenario the $6.2 billion requested for the MX missile in fiscal year 1984, in the fiscal year authorization bill?

Senator TOWER. I don't think I could give you a yes or no answer to that because I think we would have to consider what alternatives there might be in terms of modernization of our force. I doubt if we would realize the full $6.2 billion savings because I think we would want to consider other means of modernization of our strategic nuclear force, applying some of those funds to that purpose. So I couldn't give you a straight answer on that one right now. But I think I can safely say it would not result in a $6.2 billion savings.

MODERNIZATION FUNDS

Chairman HATFIELD. There are other funds for modernization. Are there items that involve the modernization in the fiscal year authorization bill?

Senator TOWER. Yes, there are. But I think that we would have to perhaps examine alternatives relative to the current Minuteman force, perhaps Minuteman modernization, improved guiding systems, and that sort of thing.

POSSIBLE AUTHORIZATION FUNDS FOR MX BASING

Chairman HATFIELD. Let me narrow the question down then. Would you anticipate that you would have any money in the authorization legislation for the basing mode of the MX missile if this resolution is not supported by the Senate?

Senator TOWER. Well, of course, obviously, Mr. Chairman, the Congress is not bound by a previous act. They would on the one hand reject the resolution of approval for fiscal year 1983 and then turn around a few days or a few weeks later and adopt it in the authorization bill. That is a possibility. So there might be some second thoughts on it. But I think that I can't predict precisely what the committee would do in the event that the resolution is rejected.

Chairman HATFIELD. Might I interpret from your response that there is some possibility of the Armed Services Committee, in light of a turndown of this concurrent resolution, going ahead anyway?

Senator TOWER. I think we have to consider the circumstances, Mr. Chairman. I am not inclined to walk the plank for a losing cause, and I think a great deal would depend on any developing sense of the Senate on how we should proceed.

Chairman HATFIELD. Why I press you on this particular point is that we are not only engaged at the present time in debating the question of the basing mode of the MX missile but, as you well know, we have been stalemated on the floor for a number of days now on the question of the budget resolution. Also, we have before us a proposal by the President for a 10-percent increase over last year in military or defense spending. We have a House-passed and a Senate-passed committee resolution which indicates 5 percent. We have other percentages floating around of 7.5, 6, 6.5, and so forth.

I think one of the major issues that is confronting the Senate at the moment is the question of this increase in military spending. This is not isolated to a one-weapons system. This question I am asking you, but really it is in the context of the whole question of how much increase shall the Senate and the House of Representatives make.

Senator TOWER. Well, may I first say that the Senate budget resolution contained a provision for a 5-percent increase in real terms. The House resolution, actually based on the CBO analysis, provided for only about a 2.8-percent increase in real terms, which we feel is dangerously low. There are current proposals pending on the budget resolution for raising the amount of the increase from what was reported out of the Budget Committee, anywhere from 6.5 percent to 7.5 percent. So I think there is some microcosm that will happen.

Now the administration is no longer asking for the 10-percent increase because some savings have been realized in fuel costs, in inflationary assumptions, international exchange, and because the original budget request contained a recommendation that for MX basing money it would be based on other things.

There will be some savings realized even if the resolution your committee is considering is approved, about $1.4 billion in obligational authority. There will be a reduction in the original adminis-

tration recommendation, which would take it down to 7.5 percent anyway.

CAUTION ON BASING MODE

Chairman HATFIELD. Senator Tower, you had previous reservations about this particular basing mode.

Senator TOWER. Strong ones, and I have expressed them in very strong terms, Mr. Chairman. But after all, this is a democracy and, either fortunately or unfortunately, the selection of weapons systems is subject to the political process in this country, unlike the situation in the Soviet Union where the Soviet defense planners decide what they want and that is what they get. In this country it is submitted to the political process; and I think, considering this is the best we can do and is probably the most salable. It is not the most desirable, in my view, from a military standpoint. However, it is better than doing nothing at all.

I think, too, that we have to consider that along with this we are not just stuffing these new missiles in old silos and becoming increasingly vulnerable. You can look at it two ways.

If indeed we have to sustain the Soviet first strike, those surviving systems will have more warheads than they would were we not to deploy the MX. That is to say we would have still some more residual countervailing force. And two, there is the plan to go ahead with extensive research and development on making the MX more survivable. There are many avenues that can be explored, including deception, although that is not a likely one, and hardening the ballistic missile defense.

Chairman HATFIELD. You want the missile and you will take it any way you can get it.

Senator TOWER. And I think, too, it is essential to give us negotiating leverage in Geneva on strategic arms reduction. Now, I don't want anyone to fall in the error of calling it a bargaining chip. It does give us negotiating leverage, but it is not necessarily a bargaining chip. Should we achieve some degree of strategic arms reduction, which we all hope will occur, substantial and drastic arms reduction, this still can remain in our arsenal as a modern system. We are reasonably sure the Soviets would want to keep their modern systems.

Chairman HATFIELD. Senator Jackson, any comment?

Senator JACKSON. I would only say, Mr. Chairman, that I think the lesson of all of this is that at the current time all land-based systems are vulnerable to a degree. I think that is the hard lesson which has come out of the Scowcroft Commission report.

I do feel if history is any guide, the only way the Soviets are going to move—and I have some hopes; I am more hopeful that they will move toward some kind of an accord in the next 12 months or so—is to move in this direction.

I remember all the flak that I took over the ABM. I handled on the floor, the ABM proposal. We were told this would start an arms race of no ends in terms of its totality. And after we passed it by one or two votes in the Senate—it was a tie, as I recall—the Soviets, of course, then started moving at the conference table and we now have a treaty, as you will recall, Mr. Chairman, limiting the

ABM to the two sites. And I see the need here to demonstrate our will, to really provide an inducement for them to bargain.

Chairman HATFIELD. Thank you.

Senator Stennis?

DETERRENCE

Senator STENNIS. Mr. Chairman, it is encouraging to see there is such an interest in this matter by the public and the press and everyone. But we are right down to the nub of the matter now.

We have the situation here where the value that the weapon may have is the matter of deterrence. We are certainly not operating on a margin that we can just throw that away. I think perhaps its main value is deterrence, and the lack of it is an encouragement to potential enemies if they really are planning something in the field of making such an assault on us.

I think, though, the arms limitation matter is still a possibility. You have to have something in that field, as I see it. It is still a possibility. But the way to kill our chances is for the United States to go to the bargaining table without a weapon in this field. That is a certain way to throw away whatever chance we have to get an arms limitation agreement that has meaning. So I feel we have known that a long time, but we keep putting it off for years, and we are now down to the stickler.

I think this Scowcroft report, all the conflicts in evidence, scientific judgment and everything else, is better summed up in the Scowcroft report and its recommendations rather than any other place that I know of. This is the way I think we ought to go.

We have to have four committees pass on this, four major committees—two in the House and two in the Senate—and then the membership, the body of the membership has to follow those recommendations to ever get a bill. So everyone is entitled to an opinion, but there comes a time when we have to merge those opinions into something practical. I am ready to do that. I hope we can pass on the Scowcroft report and let it be known positively and firmly that we are going to move and move in that pattern and we are going to do whatever is necessary to stick to it. Of course, if there is any threat at all to us, and I think there is some—I don't believe it is anything that we can't head off—we still have time and know-how. So I hope that we will agree to the recommendation of the President, in all deference to anyone else who may disagree. Maybe the votes we will have this week will decide the matter.

That is all I have to say.

Chairman HATFIELD. Thank you, Senator.

Senator Mattingly, do you have any questions to ask the witnesses?

Senator MATTINGLY. No, not at this time.

Chairman HATFIELD. Senator DeConcini?

FAVORABLE RESPONSE TO MX DEPLOYMENT

Senator DECONCINI. Mr. Chairman, thank you.

I just would like to ask the distinguished chairman and Senator Jackson, what is your response to the proposition that we approve this resolution either with a comment from the President, ex-

pressed in some manner to Congress and the public, that he would proceed with the Scowcroft recommendation both as to arms limitation reductions and further missile development? Can you respond to that?

Let me first say that I am torn as a member of this committee, having been a supporter of the MX until dense pack came, when I fell off the wagon. Now we don't have survivable system any more—we have given that up. I think Senator Tower expresses it very well, this is the best we can get. I have got to find a reason now to support a system that I was totally committed to before because of its supposed invulnerability. So if you could respond to that, it would be very helpful to this Senator.

Senator TOWER. Let me first simply refer back to what Senator Jackson said about the whole issue of vulnerability. There is no such thing as a totally invulnerable system. You try to achieve maximum survivability.

Senator DECONCINI. Let me just interrupt, Mr. Chairman. And I understand what you are saying and reiterating. But certainly the racetrack or the multiple silos system is less vulnerable than this system.

Senator TOWER. Yes. And I think dense pack would be. But that is behind us now and we have to look to the future.

As to the recommendations of the Scowcroft Commission on changing the thrust of our negotiating posture from a limitation on launchers to a limitation on throw-away and warheads, both Secretary Weinberger and Secretary testified in favor of that approach before our committee, and the President has indicated his favorable disposition toward that approach. This morning I discussed this issue with personnel at the White House, before I came to testify, anticipating that this question might come up. In fact, the National Security Council is at this very moment meeting to consider the prospect of tabling proposals based on limitations on warheads and the throwaway rather than on launchers. So I think everybody welcomes that suggestion by the Scowcroft Commission. I think the administration is now determined to pursue that course.

Senator DECONCINI. Do you anticipate the administration will make that very clear to Congress?

Senator TOWER. Yes, I think they will. As a matter of fact, I think it has been made pretty clear. I think what we have to avoid, however, is trying to dictate negotiating posture to the administration. This always I think places our negotiators at a disadvantage. But I think there is little question in my mind, as a matter of fact there is no question in my mind but what the thrust of our negotiating posture will be changed to accommodate the idea of limiting warheads and throwaway rather than launchers.

Senator DECONCINI. Would the Senator from Washington like to comment?

Senator JACKSON. I would merely add that in my personnel judgment, I think arms control and the negotiating posture of the President and the administration is a vital part of the MX debate. Clearly we would not have the votes without the assurance the President has given, and he has been pretty consistent in that regard, that he will move vigorously to pursue arms-control proposals that will meet the basic requirements of arms control. Of

course, that is that the fundamental elements of parity, mutuality and verifiability must be present.

PARITY IN SCOWCROFT REPORT

Senator DECONCINI. Senator Jackson, if I can interrupt, I don't think the Scowcroft report calls for parity, if I read it correctly.

Senator JACKSON. It all depends on how you define parity.

Senator DECONCINI. That is one of the underlying problems that this Senator is having. I would like to see a commitment from the administration, and I am encouraged from what the Senator from Texas says that we may get that officially—maybe it has been said to some of you; it hasn't been said to me—that the President is willing to change the direction of our arms-control negotiations, utilizing the Scowcroft approach although I don't advocate tying his hands to any specifics.

Senator JACKSON. Well, the launchers approach alone, of course, is not the answer, because if you follow that premise, the whole issue of warheads, MIRV'ing, the number of warheads can overcome the quality of numbers in terms of launchers.

SURVIVABILITY OF MISSILE SYSTEMS

Senator DECONCINI. Well, it depends on whether or not they are survivable.

Senator JACKSON. Pardon me?

Senator DECONCINI. It depends on whether or not they are more survivable.

Senator JACKSON. Yes; and it goes just beyond. The point I think that needs to be emphasized, that is in my statement, which will be in the record, is that if we fail to have a credible ICBM retaliatory force, we then lose the other leg of the triad, which is the bomber force. There is no way that you can have a survivable bomber force unless you have a credible land-based ICBM force, because your adversary can concentrate on your bomber force and he doesn't need to use ICBM's to eliminte those forces. They can be eliminated with their submarine forces.

I don't think we should forget that fact. And they would be free, too, to than, in addition, concentrate on finding solutions to the so-called invulnerable sea-based strategic force. And when you talk about failing to do the job on the ICMB force, you are talking about the other leg of the triad as well.

So what we want here, Mr. Chairman, is stability. I think we have to understand a little bit of Russian history to know that when they talk about parity and they say the United States is entitled to 100 but they are entitled to 130, they honestly believe that, in my view, because they see themselves as a part of the Eurasian land mass surrounded, and they constantly make that argument.

I would make the other observation that the Soviet military, and I underline shall we say professional military, are very cautious. They don't move in a reckless manner. That has not been the history of Czarist Russia and Communist Russia. There is an old Russian proverb that says don't go into the river unless you know where the fjord is. They are cautious.

In think what is needed in this whole business of deterrence is a steadiness, a firmness on our part to avoid wild blandishments, wild denunciations of the leadership in the Soviet Union.

Senator DECONCINI. One last question, if I could.

Senator JACKSON. That is a part of deterrence that I want to emphasize. I think if we manage our rhetroic, it will help tremendously in working out an accord.

Senator TOWER. May I commnet briefly on Senator Jackson's response.

The operable words in the Commission report are "comparable ability." They don't use the word "parity." But you can use many words, "essential equivalence," or what have you. The report says comparable ability.

What Senator Jackson says is absolutely correct. If we abandon, in effect abandon, the land-based leg by our failure to modernize it, then we permit the Soviet war planners to concentrate on the other two legs of the triad, the bombers being the most vulnerable. The Soviets are making substantial advances in antisubmarine warfare capability. I think they would focus on that and dedicate resources to that purpose, where we would go to a diad; that is to say, only having an air leg and the submarine-based leg.

One of the things we must do is maintain elements of uncertainty in the thinking of the Soviet war planners, and we must complicate matters for them as much as possible and force them, should they consider a first strike, to pay the highest possible price for it. That, then, is the thrust of deterrence. Push them up to a price that they are not willing to pay. Unfavorable force exchange ration, for example. In other words, to defeat our systems they would have to launch so many of their own weapons that our residual force would be able to do them considerable damage that they would consider to be unacceptable. So this is the heart of deterrence.

ABM TREATY

Senator DECONCINI. Mr. Chairman, if I could just ask one other question. Senator Jackson raised the point of the ABM Treaty. I was not here then. Senator Andrews last week raised it when Secretary Weinberger was testifying, that we spent about $4 billion on an ABM system and then that system was offered up as a bargaining consideration. Senator Tower says the MX is not a chip, but indeed we know that it could be one, even though that is not what we are here to consider. Senator Andrews' question lingers in my mind. If indeed it can be and might be part of the negotiations, is the $16 billion necessary to get that negotiation?

I know you want the missile and I want the missile, too. But is there any other thing that we can use for negotiation to shoulder $16 billion for a new missile system?

Senator JACKSON. May I respond?

Senator DECONCINI. Please.

Senator JACKSON. I can only go back to history. You will recall the Baruch-Acheson-Lillenthal proposal offered in 1946 to the United Nations. We offered to turn over our nuclear arsenal to the

United Nations under a system of control, and international inspection, and so on, and so forth. The Soviets vetoed it.

It brings home the fact that based on history, the Soviets will not bargain on something that they don't have; nor will they bargain when the other side doesn't have it. And that has been true regrettably at a costly price, but far less costly than it would be if we got into a real arms race in terms of having a large number of ABM systems. I think it was a small rice to pay.

My own view is that until the first Pershings are deployed, the Soviets will not move. I have a strong feeling that they will start moving when those Pershings are being deployed. Regrettably, I would like to see the other approach, so that you could have a stipulation that we will outlaw, we will say the MX, on condition that they take certain steps—for example, regarding their SS–18's and 19's and 17's, the very large missiles. The 18, which is what, twice the size of the MX.

But I can only open up the history books and say that they don't move until they see what has happened. And I am very hopeful over the longer haul, if we are steady and we are confident in our position and that we maintain a consistent position—I think we are doing it, Mr. Chairman, at a time when the NATO alliance is stronger in terms of national will within NATO than in any time since it was founded in 1949. The Soviets have helped that achievement.

Here we have a situation, for example, in Western Europe where the headquarters for the peace movement in Sweden, its leader who has been very unfriendly as far as NATO is concerned, has denounced the Soviets for moving submarines into their bays, and harbors, and fjords. You have the Socialist movement in Europe coming out strongly against the position taken by the Soviets, expelling them from their country, all the way from Mitterand's group to the recent elections in Spain, Portugal, and neutral countries like Sweden and now Switzerland.

So that the opportunity, I think, Mr. Chairman, for agreement is better now than it has been for many years, if we are steady, consistent, and determined.

THE 1969 SENATE DEBATE

Senator TOWER. May I say, Senator Jackson is absolutely right on that point. We both remember it very well because we were the floor leaders for our respective parties on that issue in the Senate in 1969 I believe it was when this matter was debated. Senator Jackson did most of the talking and I handled the flip charts at that time.

But the fact is we would not have gotten an ABM agreement had we not authorized the development and deployment of an ABM system. The fact is that even though we invested $4 billion in a system that was ultimately dismantled, the savings realized as a result of there being no ABM race has paid for itself many times over. So it was a cost-effective thing to do.

Let me go further and note that unilateral actions on our part generate no comparable response on the part of the Soviets. The cancellation of the B–1 did not and the fact that now we are phas-

ing the Titan missiles out of inventory has evoked no comparable response from the Soviets. I might note the Titans carry the biggest throwaway of the biggest missiles we have in our inventory. And we get no comparable response from the Soviets.

So we are going to have to move if we are going to have any negotiating position at all. The Soviets do not regard arms negotiation as seminars in political stability.

Chairman HATFIELD. Thank you, gentlemen.

Senator DECONCINI. Thank you, Mr. Chairman. I wish I could share with Senator Jackson the feeling or concern he has that the NATO is stronger than ever. I agree that some of the things happening in Western Europe are positive responses to the threat posed by the Soviet Union. But the reports and things I have seen, there seems to be more hostility toward NATO and deployment of American missiles there than we have seen in a long time.

Senator JACKSON. May I say, sir, that each and every Foreign Minister, Defense Minister, has supported the deployment of the Pershing. The countries I am speaking of, the governments—now demonstrations, yes, but I don't think we can equate the numerical numbers of those demonstrating with the majority view of the people.

Senator DECONCINI. I don't know. I take it very seriously when I see 50,000 people out there marching. And although I wish they weren't there, I don't just come to a conclusion that everything is OK there.

Senator JACKSON. I don't say everything is OK. But I do say that because of the way the Soviets conducted themselves in the German elections, for example, helped to bring about victory over the SBD. I don't think there is any doubt about it in my mind. I think when Mitterand, who is to the left of the Social Democrats, he is a Socialist, but to the left of the Social Democrats, takes as strong a position as he has on the deployment of the missiles, here is a man way to the left, I think it indicates that the unity within the alliance is greater now than it was from the time of its founding in 1949.

The only country where I could say that there is any trouble is in Greece, and that is largely a personality thing, a man named Papandreou. But all the other countries have been consistently supportive. And the Soviets doing what they are doing in Sweden is hard to believe.

It is clear, I think, to the small countries, as well as to the large countries, that if the alliance is not held together and is strong, the risktaking on the part of the Soviets, adventurism, will increase. I don't believe they are going to start a nuclear war, but I think the risktaking goes up as they feel that they have a clear advantage strategically over the West.

Senator TOWER. The matter of deployment in Europe was very much an issue in the German elections. Of course, the government that supported that deployment was reelected by a very impressive margin.

Chairman HATFIELD. Thank you, Senator CeConcini.

Thank you, Senator Tower, for coming this morning, and Senator Jackson, thank you. We thank Senator Stennis and Senator Mattingly.

CONCLUSION OF HEARINGS

[Whereupon, at 11:05 a.m., Tuesday, May 10, the hearings were concluded, and the committee was recessed, to reconvene at the call of the Chair.]

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